# 2000 Occupational Outlook



Creating workforce solutions™ for the San Diego region

In partnership with:

THE STATE OF CALIFORNIA,
EMPLOYMENT DEVELOPMENT DEPARTMENT,
LABOR MARKET INFORMATION DIVISION
and
THE CALIFORNIA OCCUPATIONAL INFORMATION
COORDINATING COMMITTEE

San Diego County January 2000 \$25.00

# San Diego County 2000 OCCUPATIONAL OUTLOOK

The California Cooperative

**CCOIS** 

Occupational Information System

A Product of the California Cooperative Occupational Information System, sponsored by:

THE SAN DIEGO WORKFORCE PARTNERSHIP, Inc.

THE STATE OF CALIFORNIA EMPLOYMENT DEVELOPMENT DEPARTMENT,

LABOR MARKET INFORMATION DIVISION

AND

THE CALIFORNIA OCCUPATIONAL INFORMATION COORDINATING COMMITTEE

#### California Occupational Information

**Coordinating Committee** 

www.soicc.ca.gov

John Corcoran Executive Director

#### San Diego Workforce Partnership, Inc.

www.workforce.org

Lawrence G. Fitch President & CEO

Terri Bergman

Director, Research, Planning, and Evaluation

Gary Moss

Project Coordinator

John Berkley

Labor Market Specialist

#### Research Assistants

Jadranka Fischer

Elaine Lewis

Rachel Murray

Katrina Radojevic

#### **Employment Development Department**

Labor Market Information Division

www.calmis.ca.gov

Brendan Kelly CCOIS Group Manager

Quentin Turner Research Manager

Susan Connelly CCOIS Site Analyst

#### PURPOSE OF THIS REPORT

The San Diego Workforce Partnership, Inc. established by the City and County of San Diego to "provide for a regional, comprehensive system of planning and administration to promote effective and efficient use of regional employment and training resources. Included is labor market information services and the production of the *Occupational Outlook Report* which we research, compile, publish annually, and distribute countywide to provide an on going analysis of the San Diego county labor market.

Annually, specific occupations are targeted and hundreds of employers throughout the county are surveyed. Information regarding qualifications, wages, benefits, and advancement opportunities is obtained and published in a user-friendly format for use by:

- Job Seekers
- Career Counselors
- Program Planners
- Trainers
- Employers

- Economic Development Personnel
- Curriculum Designers
- Human Resource Managers
- Educators

#### <u>Labor Market Perspective:</u>

The economy in the San Diego region has grown tremendously in the last half of the '90s. Stymied by a recession during the early years, the area emerged from the downturn in '94 and experienced an increase in the region's gross regional product that took it from \$70 billion to nearly \$95 billion in '99. Comparing the region's gross regional product to that of other countries San Diego county ranks 37th, and when compared to other U.S. metropolitan areas it ranks 16th.

The local unemployment rate peaked in '93 at 7.7% and has steadily declined to 3.2% in '99, a level the region had not experienced since the late '50s. The area experienced a shift in the economy during the same time period. In the late '50s nearly 31% of the area's jobs were in the manufacturing sector while 12% were in the services sector. The end of the century shows nearly a complete reversal, with 11% of the payroll jobs in manufacturing and 33% in the services sector. Thus, San Diego has been part of the shift in the global economy from the manufacturing age to the services and information age.

Leading San Diego's economic change is a group of 16 local industry clusters, of which the fastest growing (in employment) are financial services, software and computer services, business services, communications, environmental technology, biotechnology and pharmaceuticals, and computer and electronics manufacturing. Just behind this group of clusters in employment growth are recreational goods manufacturing, entertainment and amusement, visitor services, medical services, and horticultural activities.

The clusters of fruits and vegetables, defense manufacturing, the uniformed military, and biomedical products have also contributed to San Diego's employment growth, but have slowed their growth pace recently. These 16 industry clusters are projected to drive the region's economic growth into the new millennium.

As the economy has changed so has the workplace and its demands. For most occupations, both the existing workforce and new workforce entrants will confront an increasing demand for specific and/or technical skills, skills which they must possess if they're to be competitive in the region's labor market.

Employers are seeking computer literate workers – with Internet savvy – in most industries and at most occupational levels. Employers are placing increased emphasis on such soft skills as customer service, communication, problem solving, critical thinking, and interpersonal relations. Job seekers and existing employees should be prepared to work in environments requiring flexibility, change management, and the ability to work either independently or as member of team.

Employees possessing these types of skills will be able to move up career ladders and along career lattices. With the rapid changes in technology and advances in industry specific knowledge, employers and employees alike need to commit to the concept of continuing education and life-long learning.

Our research has documented employers' need for and commitment to these technical and soft skill requirements. Quality education and training programs providing these cross-occupational skills as well the specific skills required for the region's driving clusters are needed for San Diego to continue to grow and prosper and provide the region's workers the opportunity to advance in their careers and share in the area's increasing wealth.

#### **How To Use This Report:**

ii

Occupations in this report include mid-level and emerging ones throughout San Diego county. The format was specifically designed to be easy to understand and use. The introductory sections provide an overview and quick reference for the terminology and coding systems used throughout the report. Please review the Description of Individual Occupational Profiles to assist in interpreting the information.

For questions, please call the labor market information unit at the San Diego Workforce Partnership, 619 - 238-1445.

#### **ACKNOWLEDGMENTS**

The San Diego Workforce Partnership, Inc. thanks the San Diego Local Occupational Information Coordinating Committee (LOICC) members for their contributions to the San Diego 2000 Occupational Outlook. The role of the LOICC is to guide the selection of occupations to be surveyed, and establish community linkages for input into the selection process. The profiled occupations were first nominated by Career Counselors, Rehabilitation Specialists, Case Managers, Educators, Program Planners and Human Resource Managers, then finalized by the LOICC. The list of occupations includes many that have education and training programs available through local community colleges, the Regional Occupational Program (ROP), adult education, private training providers, extended studies, and colleges and universities (included in (Appendix A). Internet access to a state-wide data base of education and training providers is available at: www.soicc.ca.gov.

Dr. Emmett Casey recently retired from his full-time position as Dean of the School of Public Service at Mesa College and as chair of the LOICC which he held for the last nine years. We extend our appreciation to Dr. Casey for his commitment and dedication to programs for underserved populations and workforce development issues.

#### Participants in the 1999 LOICC include:

Lorah Austin, San Diego State University, Psychology Department John Berkley, San Diego Workforce Partnership, Inc.

Kelly Cunningham, Greater San Diego Chamber of Commerce

Cheryl Mason, Employment Development Department

Gary Moss, San Diego Workforce Partnership, Inc.

David O'Rell, Grubb & Ellis

Cindy Perry, San Diego Metro Career Center

Steve Plunk, Labor's Community Services Agency

Cheryl Rietz, California Department of Rehabilitation

Pat Stallard, San Diego Metro Career Center

Gwynne Wady, United States Marine Corps,

Career Resource Center

Karin Weddig, San Diego Regional Technology Allicance Susan Yamate, San Diego County Office of Education,

Regional Occupational Program (ROP)

In collecting the data for the individual profiles, over 1450 local employers graciously gave their time and valuable responses. Without their cooperation, the Occupational Outlook Report would not be possible. To all the participating employers we express our appreciation and extend a BIG THANKS!

## **METHODOLOGY**

### **Steps in Research**

- Occupational forecast: Occupational projections are developed by the Employment Development Department Labor Market Information Division (LMID) and used to help identify growing and declining occupations.
- 2. Occupation selection: Annually a list of 100 occupations is presented to an audience of vocational counselors, trainers, employers and educators at the Occupational Outlook dissemination meeting. Attendees rate the importance of obtaining information for the occupations identified. The LocalOccupational Information Coordinating Committee (LOICC) reviews the results of these rankings in detail and makes the final selection of occupations to be studied.
- 3. <u>Questionnaire development:</u> Specific information needs for each occupation are determined, and questionnaires are developed by LMID to respond to local information needs.
- 4. <u>Sample selection:</u> LMID generates employer samples by industry and employer size. Employers are contacted to verify that they employ persons in the occupation and are willing to participate in the project.
- Employer survey: Confidential employer surveys are conducted by telephone, fax or mail. Completed surveys are reviewed for internal consistency and employers are recontacted for clarification as needed.

- 6. <u>Data entry and tabulation:</u> Completed surveys are reviewed and the responses entered in the California Cooperative Occupational Information System (CCOIS) database which generates detailed data tabulations. Wages included in this report are those paid by the employers participating in the survey for employees at three levels of experience. The report does not include extreme wages.
- 7. <u>Written analysis:</u> The data from those tabulations and other relevant information is carefully analyzed to prepare the individual occupation profiles. (Sufficient information was collected from July 15 to September 15, 1999 to develop 30 profiles for the 2000 portion of the report.)

#### **Report Distribution**

- The written analysis is presented at a public dissemination meeting, which is the initial step in publicizing the occupational information collected.
- 2. The Occupational Outlook is also distributed to high schools and community colleges, career counselors, vocational rehabilitation offices, employers, human service agencies and library systems throughout San Diego county.
- 3. The occupational information projections, education and training sources will be incorporated into the ERISS software. The 2000 Occupational Outlook is accessable at the Partnership's website: www.workforce.org.

# Uses for 2000 Occupational Outlook

The information in this report can be used by a variety of organizations and individuals for many different purposes. Possible uses include:

Career Decisions -Career counselors and job seekers can make informed occupational choices based on skills,

> abilities, interests, education, and personal needs. The localized information is easy to read and includes employer requirements and preferences, wages, labor demand, and sources of

employment and training.

**Program Planning -**This report provides local planners and administrators with employment, training and

placement data, as well as occupational size and expected growth rates. Program planners

can use this data to evaluate, improve and eliminate programs, or to plan new programs.

Curriculum Design -Training providers can assess and update their curriculum based on current employer need and

projected trends, as indicated in this report.

**Economic Development -**Local government agencies and economic development organizations will find information on

the labor pool, such as occupational size, expected growth rates, and wages useful in

determining the potential for business growth and development in our labor market area.

**Program Marketing -**Training providers can effectively market their programs by informing students, employers, and

others that the chances for job placement are much greater because their training programs are

developed using reliable local occupational data.

**Human Resource Management -**Small business owners and large corporate human resource directors alike can use this report to

help determine competitive wages and benefits, improve their recruitment methods, and assess

the availability of qualified workers for business relocation or expansion purposes.

This report is intended to be used as an informative reference to support these and many other decisions. To maximize the use of this

information, please contact Labor Market Information at the San Diego Workforce Partnership, Inc. 619-238-1445.

# TABLE OF CONTENTS

		PAGE
Methodology		iv
Uses for 2000 Occupational Outlook		V
Oses for 2000 Occupational Outlook		V
Description of Individual Occupational Profiles		x
OCCUPATIONAL TITLE (Year Published)	OES CODE	
Accountants and Auditors (1998)	211140	2
Activities Directors (1999)	195164999	4
Assemblers & Fabricators - Except Machine, Electrical,		
Electronic and Precision (1999)	939560	6
Assemblers, Electrical & Electronic Precision (2000)	931140	8
Automated Assemblyline Technicians (1998)	No OES Code	10
Biotechnology Laboratory Assistants (1998)	No OES Code	12
Bookkeeping, Accounting and Auditing Clerks (2000)	553380	14
Bus and Truck Mechanics (2000)	853110	16
Carpenters (1998)	871020	18
Chemical Equipment Controllers and Operators		
(Biotechnology) (1999)	929350999	20
Chemical Equipment Controllers and Operators		
(Bio-Process/Pilot Plant Technicians) (1999)	No OES Code	22
Chemical Equipment Controllers and Operators		
(Chemical Process/Pilot Plant Technicians) (1999)	No OES Code	24
Chemists (Except Biochemists) (1998)	241050	26
Child Care Workers (1998)	680380	28
Civil Engineering Technicians and Technologists (1998)	225020	30
Civil Engineers (2000)	221210	32
Computer Engineers (2000)	221270	34
Computer Programmers, Including Aides (1999)	251051	36

OCCUPATIONAL TITLE (Year Published)	OES CODE	PAGE
Concierges (1999)	352177999	38
Correction Officers and Jailers (2000)	630170	40
Customer Service Representatives (1999)	553350998	42
Data Base Administrators (2000)	251030	44
Dental Hygienists (1998)	329080	46
Dietetic Technicians (1999)	325230	48
Education Administrators (1999)	150050	50
Electrical & Electronic Engineering Technicians		
& Technologists (1999)	225050	52
Electrical & Electronic Engineers (1999)	221260	54
Electrical & Electronics Assemblers (1998)	939050	56
Electric Home Applicance Repairers (2000)	857110	58
Employment Interviewers -		
Private or Public Employment Service (1998)	215080	60
Financial Planners (1999)	430142999	62
First Line Supervisor / Manager -		
Production and Operating Workers (1998)	810080	64
Food Service Managers (1999)	150261	66
General Office Clerks (1998)	553470	68
Graphic Artists (1998)	No OES Code	70
Hand Packers and Packagers (2000)	989020	72
Hazardous Materials Removal Workers (2000)	878030	74
Heating, Air Conditioning and Refrigration		
Mechanics and Installers (2000)	859020	76
Hotel Desk Clerks (2000)	538080	78
Human Resource Technicians (1999)	166276998	80
Import / Export Specialists (1998)	No OES Code	82
Inspectors, Testers and Graders-Precision		
(Manufacturing Assistants, Bio-Process) (1999)	830020999	84
Instructional Aides (1999)	315211	86
Interpreters - Sign Language (2000)	No OES Code	88
Landscape Architects (1998)	223080	90
(,		

OCCUPATIONAL TITLE (Year Published)	OES CODE	PAGE
Loan and Credit Clerks (2000)	531210	92
Machinists (1999)	891080	94
Maintenance Repairers, General Utility (1998)	851320	96
Massage Therapists (2000)	No OES Code	98
Medical and Clinical Laboratory Assistants (1999)	329050	100
Medical Assistants (1999)	660050	102
Medical Records Technicians (1998)	329110	104
Medicine and Health Service Managers (2000)	150080	106
Multimedia Specialists (2000)	No OES Code	108
Nurse Aids (1998)	660080	110
Occupational Therapy Assistants and Aides (1999)	660210	112
Operating Engineers (Heavy Equipment Operators) (1998)	979560136	114
Ophthalmic Technicians (1998)	No OES Code	116
Painters and Paperhanagers (2000)	874020	118
Paralegal Personnel (1998)	283050140	120
Personal and Home Care Aides (2000)	680350	122
Personnel Trainers (1999)	166227142	124
Pharmacy Technicians (2000)	325180	126
Physical Therapists (1999)	323080144	128
Physicians Assistants (2000)	325110	130
Plumbers, Pipefitters and Steamfitters (2000)	875020	132
Probation and Parole Officers (1998)	No OES Code	134
Public Relations Managers (1998)	No OES Code	136
Public Relations Specialists and Publicity Writers (2000)	340080	138
Registered Nurses (1998)	325020	140
Roofers (2000)	878080	142
Sales Representatives, Except Scientific (2000)	490080	144
Secretaries, Except Legal and Medical (1999)	551080	146
Secretaries, Legal (1998)	551020	148
Secretaries, Medical (1999)	551050	150
Sewing Machine Operators - Garment (1999)	927170	152
Sheet Metal Workers (2000)	891320	154

OCCUPATIONAL TITLE (Year Published) Sheriffs and Deputy Sheriffs (1999)	OES CODE 630320	<u>PAGE</u> 156
Stationary Engineers (Power Plant Operators) (1998)	950320	<b>158</b>
Stock Clerks - Sales Floor (1998)	490210	160
Stock Clerks - Stockroom, Warehouse, Storage Yard (1999)	<b>580230</b>	<b>16</b> 2
Substance Abuse / Chemical Dependency Counselors (1998)	No OES Code	164
Surgical Technicians (1998)	329280	166
Systems Analysts - Electronic Data Processing (1998)	251020	168
Teachers - Elementary School (1999)	313050	170
Teachers - Preschool (2000)	313030	172
Teachers - Secondary School (1999)	313080	174
Teachers and Instructors- Vocational Education and Training (2000)	313140	176
Technical Writers (1998)	340050	178
Telephone and Cable T.V. Line Installers and Repairers (2000)	857020	180
Tool and Die Makers (2000)	891020	182
Travel Agents (1998)	430210	184
Truck Drivers - Heavy or Tractor Trailer (1999)	971020	186
Truck Drivers - Light - Delivery and Route Workers (1999)	971050	188
Underwriters (Insurance) (1998)	211020	190
Vocational and Education Counselors (1999)	315140	192
Waiters/Waitresses (Banquet Servers) (1998)	650080	194
Webmasters, Web Site Designers (1998)	No OES Code	196
Welders and Cutters (1998)	939140	198
Appendix A: Education and Training Providers 1998 thru 2000		200
Appendix B: San Diego County: Occupations and Wages 1994 - 2000	1	232
Appendix C: Regional California Agencies Providing Local Labor Market Information		241

# DESCRIPTION OF INDIVIDUAL OCCUPATIONAL PROFILES

This is a brief description of the topics in the profiles in the 2000 Occupational Outlook, including definitions of frequently used terms explaining the survey results.

The terms throughout the report to describe survey results are:

- All: 100% of the survey responses
- Almost all: 80 99% of the survey responses
- **Most:** 60 79% of the survey responses
- Many: 40 59% of the survey responses
- **Some:** 20 39% of the survey responses
- Few: less than 20% of the survey responses

<u>Title and Definition of Occupation</u>: Each occupation has a six-digit occupational code and definition from the Occupational Employment Statistics (OES) classification system. OES descriptions are broader in scope than the Dictionary of Occupational Titles (DOT) classification system. Each OES code may include several DOT titles.

<u>Education</u>, <u>Training</u>, <u>Experience and Skills</u>: This section is a compilation of employer responses covering the following:

- Type of education and training required by employers hiring for the the occupation over the past year. While minimum educational requirements have been shown as employers expressed them, these are not always essential for the performance of job duties. Because the lack of education will create a barrier with some employers, employers' educational statements have been included in this report.
  - Related work experience and type required.
  - Listing of skills rated very important by employers.
  - Additional employer specified skills.

#### **Occupational Characteristics**:

**Career Ladders** - Reports the previous occupations from which people were promoted into the profiled occupation and those occupations which serve as promotional opportunities.

**Nontraditional Occupations** - Defined as having 25% or less workers in the occupation who are female.

**Turnover -** Calculated for each occupation, based on vacancies (resulting from promotions and employees leaving the firm) filled over the last 12 months, divided by the total reported number of persons in that occupation. This is reported as a percentage. Terms used to describe turnover are:

- Very low: Less than 6%
- Moderately low: Between 6% and 10%
- Moderate: Between 11% and 20%
- Moderately high: Between 21% and 30%
- **High:** Over 30%

**Unionization -** Shown as the percentage of the responding employers who report employees as members of a union or bargaining unit.

<u>Where The Jobs Are</u>: Identifies the industry groups that serve as major sources of employment for each occupation. The percentage indicated is derived from industry employment distribution data provided by LMID.

<u>Fringe Benefits</u>: (1998-1999 profiles) Of firms offering benefit packages, the percentage of those that responded and offered each type of benefit is shown. The following will assist the reader in understanding this section.

- Benefits may be offered but not necessarily paid by the employer.
- Part-time benefits are not reported when there are few part-time workers in the occupation.
- Additional benefits identified by some employers are listed at the bottom of this section.
- An asterisk (\*), instead of a percentage, indicates that fewer than three employers responded and offered this benefit. This information is withheld to protect the confidentiality of individual responses.

(2000 profiles) - Benefits are usually presented for full time employees. Percentages indicate who pays for the particular benefit, i.e. percent of employers that reported the the employers pays the entire benefit cost (E'er Pays All); Shared Cost percent of employers that reported the benefit paid in some proportion by employer and employee; percent of employers that reported the employee pays the entire benefit cost (E'ee Pays All); or the percent of employers that reported the benefit is Not Provided to employees.

#### **Three Most Frequently Used Recruitment Methods:**

Presents information on the methods employers use most frequently to recruit new employees. The methods are reported in order of frequency used by employers.

<u>Supply and Demand</u>: Employers are asked to rate on a four-point scale the difficulty they have in finding experienced and inexperienced applicants to fill vacancies. The employers' responses are combined to form a weighted average using a formula that includes the number of new hires and the number of firms.

The following terms describe the degree of difficulty in finding applicants:

- Very Difficult: Demand is considerably greater than supply of qualified applicants. Employers often cannot find qualified applicants when an opening exists. Qualified applicants encounter <u>no competition</u> in their job search.
- Moderately Difficult: Demand is somewhat greater than the supply of qualified applicants. Employers may have some difficulty finding qualified applicants at times. Qualified applicants may find <u>little competition</u> in their job search.
- Not Difficult: Supply of qualified applicants is considerably greater than demand. Qualified applicants may find a <u>very</u> competitive job market.

<u>Hours and Wages\*</u>: The distribution of full-time, part-time, on-call temporary and seasonal employees is reported along with the average number of hours worked per week. Although wages are shown to the nearest cent for ease of comparison, the reader should not interpret this as an indication of precision. The range and median of hourly wages are presented for three categories of employees:

- **New Hires with No Experience:** Wages paid persons trained but without paid experience in the occupation.
- **New Hires with Experience**: Wages paid to journey-level or experienced persons just starting at the firm.
- After Three Years with the Firm: Wages generally paid to persons with more than three years journey-level experience at the firm.

\*For the occupations profiled in 1998, the minimum wage was \$5.15.

\*The 1999 and 2000 data reflects the increase in the minimum wage to \$5.75 effective March 1, 1998.

Occupational Size and Growth Projections: This section presents the seven-year growth and job openings projections (1997-2004) using the OES projection system. It also summaries the size of employment in the occupation, based on percentage of the total employment in the county. Terms used to describe size of employment are:

- Small: Less than 1,662 employees (less than .15% of 1999 employment)
- Medium: 1,662 3,323 employees (.15% to .299% of 1999 employment)
- Large: 3,324 7,202 employees (.30% to .649% of 1999 employment)
- Very Large: More than 7,202 employees (more than .65% of 1999 employment)

**Growth Trends:** This is an overview of projected seven year new job growth rate in relation to the overall average new job growth rate (17.7%, 1997 - 2004) for the county. The following terms are applied to the occupational growth trends for San Diego county.

• Much Faster than Average: 26.5% or more

• Faster than Average: 19.5% to 26.49%

• Average: 15.9% to 19.49%

• Slower than Average: 0.01% to 15.89%

• Remain Stable: Equal to 0%

• Slow Decline: Less than 0%

#### SAN DIEGO CAREER CENTER NETWORK

San Diego Workforce Partnership (SDWP) Career Center Network offers six unique One-Stop Career Centers throughout San Diego county. These centers are designed to be a quick, easy way for people to access a full range of services, including links to area employers.

The Career Center Network provides job training, career assessment and recruitment for city and county residents. The network also provides recruitment services for employers looking to hire skilled, pre-qualified workers, as well as planning services for those facing layoffs or plant closures.

Even though each Career Center offers universal access to all job seekers, individuals are encouraged to select the center that best fits their needs. Because the network combines the services of many partners, which include Community Colleges, the Employment Development Department (EDD) and many others, it is also extremely flexible and allows for specialized services depending on the needs of the customer.

#### SAN DIEGO CAREER CENTER NETWORK LOCATIONS

#### **Metro Career Center**

8401 Aero Drive San Diego, CA 92123-1720 858-974-7620 858-974-9805 Fax

#### **East County Career Center**

(Located at the East County Regional Ed. Ctr) 924 E. Main Street El Cajon, CA 92021 619-590-3900 619-579-4720 Fax

#### **North County Career Center**

5315 Avenida Encinas Carlsbad, CA 92008 760-930-2400 760-930-8014 Fax

#### **South County Career Center**

1111 Bay Blvd., Suite E Chula Vista, CA 91911 619-424-1112 619-424-1144 Fax

1-888-884-SDWP (7397) www.workforce.org

#### **South Metro Career Center**

6145 Imperial Avenue San Diego, CA 92114 619-266-3600 619-266-3605 Fax

#### **Inland North County Career Center**

1935 East Valley Parkway Escondido, CA 92027 760-738-0274 760-738-8723 Fax

# SAN DIEGO COUNTY 2000 OCCUPATIONAL OUTLOOK

OCCUPATIONAL PROFILES 1998 - 2000

#### **ACCOUNTANTS and AUDITORS**

**OES 211140** 

Accountants and Auditors examine, analyze and interpret accounting records for the purpose of giving advice or preparing statements and installing or advising on systems of recording costs or other financial and budgetary data.

Alternate Job Titles: Certified Public Accountant, Financial Representative, Tax Accountant

Related DOT Codes: 160.162-010, 160.162-018, 160.162-022, 160.162-026, 160.167-034, 160.167-054

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have a bachelor degree. Some have an associate degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Most firms require 1 -2 years bookkeeping or accounting training. Employers prefer applicants with spreadsheet, word processing and specialized accounting software skills.

**Experience:** Many firms always require related work experience. They prefer to hire applicants with 2 - 4 years experience as a bookkeeper or accountant.

## **Skills rated "very important":**

Ability to meet deadlines

Ability to pay attention to detail

Ability to work under pressure

Ability to read and follow instructions

Business math skills

Ability to work independently

Ability to work as a team member

Ability to use a computer

Problem solving skills

Oral communication skills

Knowledge of accounting and spreadsheet software

Ability to write legibly

Keep current on new accounting software

Organization and communication skills

Knowledge of the Internet

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Staff Accountant, Senior Accountant, Controller, Chief Financial Officer.

Nontraditional Occupation: No.

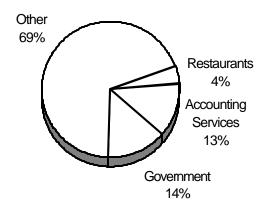
68% of workers in survey responses were female.

**Turnover:** High, 41% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE

**Industry - Percent Employing** 



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	93%
Vision Insurance:	80%
Life Insurance:	80%
Paid Sick Leave:	87%
Paid Vacation:	93%
Retirement Plan:	73%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Employee referral, in-house promotion or transfer, newspaper advertisements, unsolicited applicants.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Accountants and Auditors

Experienced applicants: Somewhat competitive

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Accountants and Auditors work full-time, 43 hours per week and some work part-time, 25 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$7.00 - 14.50	\$10.00
New Hires, With Experience:	\$9.50 - 24.00	\$12.00
After Three Years With the Firm:	\$13.00 - 33.50	\$16.25

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above

New jobs through 2004: 1,250

Separations to 2004: 1,180

\*Total Openings: 2,340

**New Job Growth Rate:** 16.4%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 201

#### **Key Terms:**

# **ACTIVITIES DIRECTORS**

# 195164999

Activities Directors develop recreational, physical education, and cultural programs for various age groups. They organize and lead groups, such as senior citizens, children and street gangs in activities that meet interests of individual members. They may demonstrate and instruct participants in activities, such as active sports, group dances and games, arts, crafts, and dramatics. They may organize current-events discussion groups, or conduct consumer surveys. They may promote group work concept of enabling members to develop their own program activities. They may keep records; and may recruit, train, and supervise paid staff and volunteers.

Alternate Job Titles: Recreation Specialist, Recreation Coordinator, Recreation Supervisor, Recreation Director

**Related DOT Codes:** 187.117-042, 187.117-054, 187.167-026, 187.167-230, 195.167-026

#### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have some college (but not necessarily a degree). Some have a bachelor degree usually in education or healthcare administration.

<u>Training:</u> Many firms never allow training to substitute for work experience. Those that do, prefer applicants with 12 months training in recreational management or communications, plus first aid and CPR certification. They prefer applicants who have word processing, spreadsheet and database software skills. A state certificate is required for employment in any facility operating under Title 22 health care regulations and conducting recreational programs.

**Experience:** Many firms always require related work experience. They prefer applicants with 1 - 3 years experience as a Recreation Supervisor/Coordinator/ Director or Program Director.

# **Skills rated "very important":**

Willingness to work weekends and long hours
Ability to plan recreational activities
Oral communication and verbal presentation skills
Customer service skills and interpersonal skills
Ability to work with various age groups

Knowledge of health and safety standards

Knowledge of various cultural backgrounds

Knowledge of event planning

Ability to hire and train staff

Ability to coordinate activities with other departments

Management skills

Ability to prepare budgets and write reports

Ability to use a computer

Knowledge of sports and recreational activities

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Program Manager, Recreation Services Manager, and Executive Director.

#### **Nontraditional Occupation:** No.

68% of workers in survey responses were female.

**Turnover:** Moderately low, 10% in the past 12 months.

**Unionization:** Yes. 22% of employers and 28% of employees were unionized.

# WHERE THE JOBS ARE

Industry

Amusement Parks
Country Clubs
Hotels and Resorts
Local Governments
Physical Fitness Facilities
Retirement and Seniors Centers
Social Service Agencies
Sports and Recreation Clubs
Youth Day Care Centers and Camps

	Full-Time
Medical Insurance:	94%
Dental Insurance:	94%
Vision Insurance:	82%
Life Insurance:	76%
Paid Sick Leave:	94%
Paid Vacation:	100%
Retirement Plan:	76%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, public school or program referrals, college job fairs, college bulletin boards, and Internet.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: **Activities Directors** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

Average Weekly Hours: Many Activity Directors are seasonal workers and work 40 hours per week and many work full-time, 41 hours per week. A few work part-time, 23 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$6.50 - 15.00 \$7.00 - 15.27	\$10.82 \$12.84
New Hires, With Experience: Union:	\$8.00 -17.00 \$9.00 -16.04	\$12.08 \$14.28
After Three Years With the Firm: Union:	\$9.50 - 18.25 \$14.64 - 19.54	\$15.34 \$16.69

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile. 14 expect employment to remain stable and 4 project employment to grow over the next three years.

Education / Training Providers: See Appendix A, page 201

#### **Key Terms:**

# ASSEMBLERS AND FABRICATORS - Except Machine, Electrical, Electronic OES 939560

Assemblers and Fabricators in this category assemble and/or fit together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor. Their work may involve the use of hand tools, power tools and special equipment in order to carry out fitting and assembly operations. This includes assemblers whose duties are of a nonprecision nature. This does not include electrical, electronic, machine and precision assemblers, and workers who perform specialized operations exclusively as a part of assembly operations, such as riveting, welding, soldering, machining, or sawing.

Alternate Job Titles: Manufacturing Operators, Production Cutters/Finishers, Iron Assemblers, Assembly Worker Finishers

**Related DOT Codes:** 706.687-010, 739.687-030, 763.684-038, 809.684-010

#### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have less than a high school education. A few have a high school diploma or equivalent or some college (but not necessarily a degree).

<u>Training:</u> Many firms always allow training to substitute for work experience. Many employers provide 1 - 2 months in-house safety training.

**Experience:** Many firms never require related work experience. Those that do prefer applicants with 6 - 12 months experience as Assemblers, Machine Shop or Hand Tool Workers.

# **Skills rated "very important":**

Willingness to do repetitive work

Ability to follow safe work practices

Ability to work well with others

Ability to work as part of a team

Ability to read and follow written and oral instructions

Good eye-hand coordination

Interpersonal skills

Willingness to work with close supervision

Ability to work independently

Oral communication skills

Ability to use hand tools

Ability to withstand a noisy or dusty work environment

Willingness to work long and/or irregular hours

Ability to use small power tools

Punctuality and good attendance

Self motivation

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Assembler, Shipping and Receiving Clerk and Shop/Floor/Production Supervisor.

**Nontraditional Occupation:** No.

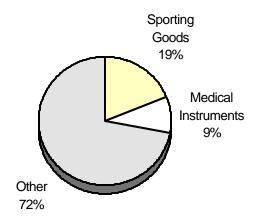
52% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

**Unionization:** None reported

# WHERE THE JOBS ARE

**Industry - Percent Employing** 



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	92%
Vision Insurance:	50%
Life Insurance:	67%
Paid Sick Leave:	67%
Paid Vacation:	100%
Retirement Plan:	75%

Other: 401-K Plan

#### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, unsolicited applicants, private employment agencies and Employment Development Department.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: Assemblers and Fabricators

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Almost all Assemblers and Fabricators work full-time, 40 hours per week. A few work on a temporary basis, or on a seasonal basis, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 8.00	\$5.85
New Hires, With Experience:	\$5.75 - 8.75	\$6.50
After Three Years With the Firm:	\$7.00 - 13.00	\$9.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 1,060
Separations to 2004: 1,340
\*Total Openings: 2,400

**New Job Growth Rate:** 12.1%\*. Projected growth is slower than

the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

#### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
10 project employment to grow. 4 expect employment to remain stable, and 1 expects employment to decline over the next three years.

**Education / Training Providers:** See Appendix A, page 202

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### ASSEMBLERS - ELECTRICAL AND ELECTRONIC EQUIPMENT – PRECISION OES 931140

Assemblers of Electrical and Electronic Equipment-Precision assemble or modify prototypes or final assemblies of electrical or electronic equipment, such as missile control systems, radio and test equipment, computers, machine-tool numerical controls, radar, sonar and telemetering systems, or appliances. This includes workers who primarily assemble electrical systems for machinery.

Alternate Job Titles: Assembly Technicians

**Related DOT Codes:** 721.381-014, 722.281-010, 722.381-010, 729.381-022

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (88%) require a high school diploma or equivalent. A few (13%) require less than a high school education.

**Training:** Most firms (62%) allow 3-6 months training to substitute for work experience. Some firms (25%) provide on-the-job training for applicants.

**Experience:** Most firms (75%) prefer but do not require related work experience. Their preference is 3 - 24 months experience as a Mechanical or Medical Device Assembler or Machine Operator.

# **Skills rated "very important":**

Ability to pay attention to detail

Ability to do precision work

Good eyesight and color vision

Ability to do routine and repetitive work

Ability to work independently

Knowledge of safe working practices

Manual dexterity

Ability to work under pressure and meet deadlines

Ability to use hand and power tools

Ability to work on a team

Oral communication skills

Ability to read and follow instructions

Ability to read and interpret blue prints and wiring diagrams

Knowledge of electrical specifications

Pass competency and soldering skills test

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Lead Assembler, Supervisor, Quality Control Supervisor.

Nontraditional Occupation: No.

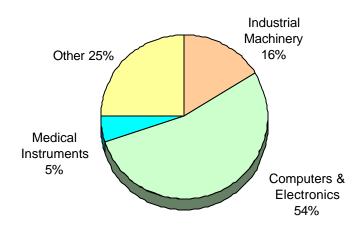
61% of workers in survey responses were female.

**Turnover:** Very low, 3% in the past 12 months.

**Unionization:** None reported.

# WHERE THE JOBS ARE

**Industry - Percent Employing** 



#### FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	E'er Pays All	Shared Cost	E'ee Pays All
Medical Insurance:	27%	47%	7%
Dental Insurance:	7%	27%	13%
Vision Insurance:	7%	20%	7%
Life Insurance:	13%	7%	0%
Paid Sick Leave:	27%	13%	0%
Paid Vacation:	60%	13%	0%
Retirement Plan:	13%	20%	13%
Child Care	0%	0%	0%

Other employer specified: 401-K Plan

#### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, walk-in applicants.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Assemblers - Electrical and Electronic Equipment Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

#### **HOURS, SHIFTS AND WAGES**

**Average Weekly Hours:** Almost all Assemblers work on a temporary or on-call basis (83%), 40 hours per week. Few (17%) work permanent full-time, 40 hours per week.

**Shifts:** All employers (100%) report having day shifts. A few (13%) also have swing or graveyard shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 7.00	\$6.50
New Hires, With Experience:	\$6.25 - 9.50	\$7.63
After Three Years With the Firm:	\$8.00 - 11.00	\$8.50

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 340

Separations to 2004: 720

\*Total Openings: 1,060

**New Job Growth Rate:** 8.2%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

#### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
12 project employment to grow and 3 expect it to remain stable

and 1 expects employment to decline over the next two years.

**Education / Training Providers:** See Appendix A, page 201

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **AUTOMATED ASSEMBLYLINE TECHNICIANS**

# (No OES Code - Emerging Occupation)

Automated Assemblyline Technicians operate, program, maintain and repair automated machine tools and systems and automated manufacturing processes, including flexible manufacturing processes, Computerized Numerical Control Machines (CNC), robots and programmable logic controllers (PLC).

Alternate Job Titles: Production Specialists, Maintenance Technicians, Test Technicians, Electronic Technicians

Related DOT Codes: 609.360-010, 609.362-010, 630.281-010

#### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have an associate degree.

<u>Training:</u> Most firms never allow training to substitute for work experience. Employers prefer applicants who have completed a 2 year associate degree program or finished a company on-the-job training program and have word processing and data base software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 2 years experience as an Electronics Technician, Production or Equipment Technician.

### **Skills rated "very important":**

Ability to work on a team

Ability to understand and follow safety procedures

Ability to analyze and solve problems

Ability to follow written instructions

Manual dexterity

Interpersonal skills

Understanding of electronics systems

Ability to use hand tools

Ability to repair hydraulic and pneumatic systems

Knowledge of sensor feedback principles and systems

Shop math skills

Knowledge of programmable logic controls (PLCs)

Ability to use precision measuring equipment

Welding or soldering ability

Knowledge of CNC codes

Troubleshooting skills

Mechanical aptitude, good hand eye coordination

Electrical and electronic knowledge

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Technician, Senior Technician.

**Nontraditional Occupation:** Yes.

3% of workers in survey responses were female.

**Turnover:** Moderately low, 9% in the past 12 months.

<u>Unionization:</u> Yes. 7% of employers surveyed and 2% of employees.

#### WHERE THE JOBS ARE

Manufacturing Companies

	Full-Time
Medical Insurance:	93%
Dental Insurance:	93%
Vision Insurance:	80%
Life Insurance:	93%
Paid Sick Leave:	80%
Paid Vacation:	93%
Retirement Plan:	93%
Other: 401-K Plan, Profit S	haring,

**Educational Reimbursement** 

\*The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, newspaper advertisements, public school or program referrals, former military applicants, web page, employee referrals.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Automated Assemblyline Technicians Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers indicate Automated Assemblyline Technicians work full-time, 44 hours per week.

Hourly Wages	Range*	Median <sup>*</sup>
New Hires, No Experience:	\$8.50 - 16.00	\$12.00
New Hires, With Experience:	\$10.50 - 18.00	\$15.00
After Three Years With the Firm:	\$12.00 - 24.00	\$19.75

<sup>\*</sup>Union and nonunion wages included.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662
OES Growth Projections: New jobs through 2004: 10
Separations to 2004: 30
\*Total Openings: 40

Openings for Automated Assembly Technicians are included in the general classification of Machinery Maintenance Mechanics, not elsewhere classified.

**New Job Growth Rate:** 4.8%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment</u>: Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 202

#### **Key Terms:**

#### BIOTECHNOLOGY LABORATORY ASSISTANTS

# No OES Code - Emerging Occupation

Biotechnology Laboratory Assistants prepare solutions and perform laboratory procedures under the direction of a research assistant or scientist. They may be responsible for a wide variety of research laboratory tasks and experiments including: making detailed observations; analyzing data; interpreting results; writing experimental reports, summaries and protocols; trouble shooting and calibrating scientific instruments; maintaining production equipment; preparing glassware, reagents and culture media and care for research animals. They may be responsible for implementing analyses of raw materials in-process inspection and quality and control audits as well as the manufacture and packaging of products and the implemention of production procedures.

Alternate Job Titles: Laboratory Assistant, Research Assistant, Assistant Scientist

Related DOT Codes: 029.361-018, 559.361-010

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have either a bachelor degree or have some college (but not necessarily a degree).

**Training:** Many firms usually allow training to substitute for work experience. They prefer applicants with 12 months of academic lab training or internship and database and word processing software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 6 - 24 months experience as a Lab Technician, Lab Assistant or Research Associate.

# Skills rated "very important":

Ability to maintain a clean working environment Ability to keep accurate records
Knowledge of safe laboratory work procedures
Ability to work on a team
Ability to pay attention to detail
Ability to follow written and oral instructions
Interpersonal skills
Problem solving skills
Knowledge of basic laboratory equipment
Organizational skills
Knowledge of personal protective gear
Ability to prepare media and make solutions
Data entry skills
Knowledge of inventory control techniques

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Group Leader, Assistant / Associate Scientist.

#### Nontraditional Occupation: No.

50% of workers in survey responses were female.

**Turnover:** Moderate, 15% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE

Biotechnology Research Pharmaceutical Manufactuing

	Full-Time
Medical Insurance:	100%
Dental Insurance:	90%
Vision Insurance:	60%
Life Insurance:	90%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	90%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, public school or program referrals, local college campus recruitment, employee referrals, private employment agencies.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	
Not Difficult		X

Job Market for: Biotechnology Laboratory Assistants

Experienced applicants: Competitive Inexperienced applicants: Very competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Biotechnology Laboratory Assistants work full-time, 41 hours per week. Some work part-time, 20 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 12.50	\$8.25
New Hires, With Experience:	\$7.00 - 15.00	\$9.00
After Three Years With the Firm:	\$8.00 - 19.25	\$11.25

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 330

<u>Separations to 2004:</u> \*Total Openings: 220

Openings for Biotechnology Laboratory Assistants are part of the above projections for Physical Life Science Technicians, not elsewhere classified, as well as for OES titles; Biological Food Technicians, Medical, Clinical Laboratory Technologists and Medical, Clinical Laboratory Assistants.

**New Job Growth Rate:** 26.8%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

**Employer Outlook on Employment :** Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 12 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 202

#### **Key Terms:**

# BOOKKEEPING, ACCOUNTING, AND AUDITING CLERKS, INCLUDING BOOKKEEPERS OES 553380

Bookkeeping, Accounting, and Auditing Clerks, including Bookkeepers, compute, classify, and record numerical data to keep sets of financial records complete. They perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. They may also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers. This does not include individuals whose primary duty is operating special office machines.

Alternate Job Titles: Full Charge Bookkeepers, Payroll Specialist

Related DOT Codes: 210.382-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (80%) require a high school diploma or equivalent. Some (20%) require an associate degree.

**Training:** Many firms (46%) require technical or vocational training and allow that to substitute for work experience. Employers prefer applicants with spreadsheet, word processing and database software skills.

**Experience:** Most firms (73%) require 6 - 36 months related work experience or 24 months experience in accounting related activities.

# Skills rated "very important":

Ability to pay attention to detail

Ability to perform routine repetitive work

Ability to use 10-key adding machine

Ability to work under pressure and meet deadlines

Excellent record keeping skills

Oral communication skills

Ability to work independently

Organizational skills

Knowledge of computerized bookkeeping and payroll

Interpersonal and customer service skills

Business math skills

Knowledge of payroll processing

Knowledge of accounting principles

Willingness to work long hours

Ability to prepare bank deposits and handle cash

Ability to handle accounts payable and receivable

Ability to manually maintain journal ledgers

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Senior Bookkeeper, Full Charge Bookkeeper, Junior Accountant, Certified Public Accountant (with additional education).

#### Nontraditional Occupation: No.

71% of workers in survey responses were female.

**Turnover:** Very low, 1% in the past 12 months.

**Unionization:** None reported.

#### WHERE THE JOBS ARE

#### Industry

Accounting & Bookkeeping Services

Car Dealers

Community Colleges

Construction

**Doctors Offices** 

Grocery Stores

Hotels & Motels

Insurance Agents & Brokers

Local, State and Federal Government

Real Estate Offices

Religious Organizations

Restaurants

# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	23%	15%	38%
Dental Insurance:	15%	15%	46%
Vision Insurance:	15%	8%	54%
Life Insurance:	8%	8%	62%
Paid Sick Leave:	23%	15%	38%
Paid Vacation:	23%	15%	38%
Retirement Plan:	8%	0%	69%
Child Care	0%	0%	77%

Other employer specified: 401-K Plan

#### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, private employment agencies.

**Others include:** Colleges and universities, internet and walk-in applicants.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		Х
Few Employers Hire		

Job Market for: **Bookkeeping, Accounting, and Auditing Clerks** *Experienced* applicants: **Little competition in job search** *Inexperienced* applicants: **Very competitive job search** 

#### **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Many (56%) Bookkeeping, Accounting, and Auditing Clerks work on a temporary or on-call basis, 39 hours per week. Some (34%) work full-time, 40 hours per week; and a few (9%) work part-time, 27 hours per week.

Shifts: All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 8.50	\$6.00
New Hires, With Experience:	\$7.00 - 12.00	\$10.00
After Three Years With the Firm:	\$10.00 - 15.34	\$12.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment:Very large - More than 7,202OES Growth Projections:New jobs through 2004:680Separations to 2004:<br/>\*Total Openings:1,790<br/>2,470

**New Job Growth Rate:** 4.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

#### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
10 project employment to grow and 5 expect employment to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 202

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

#### **BUS AND TRUCK MECHANICS AND DIESEL ENGINE SPECIALISTS**

**OES 853110** 

Bus and Truck Mechanics and Diesel Engine Specialists repair and maintain the operating condition of trucks, buses, and all types of diesel engines. Includes mechanics working primarily with automobile diesel engines.

Alternate Job Titles: Diesel Truck Service Technician, Service Technician, Mechanic I, II, Mechanic A, B, C,

Related DOT Codes: 620.281-050, 625.281-010

#### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (83%) require a high school diploma or equivalent. A few (17%) require less than a high school education.

**Training:** Many firms (59%) allow training to substitute for work experience. Many employers (44%) require technical or vocational training. They prefer applicants trained in automotive electronics or truck and diesel engine repair.

**Experience:** Almost all firms (89%) require 12 - 48 months related work experience or 2 - 5 years experience as a automobile mechanic or machinist. Few employers report hiring inexperienced applicants.

#### **Skills rated "very important":**

Knowledge of safe working practices

Ability to pay attention to detail

Ability to repair brakes

Knowledge of gas, diesel and natural gas engines

Ability to use hand and power tools

Ability to work in awkward positions

Troubleshooting skills

Ability to read and interpret technical manuals

Ability to work independently

Ability to provide own hand tools

Possession of a valid drivers license

Ability to work under pressure and meet deadlines

Oral communication skills

Ability to keep accurate records

Knowledge of automotive electronics

Ability to use electronic diagnostic equipment

Ability to repair vehicle air conditioning systems

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Mechanic, Foreman, Shop Supervisor, Fleet Equipment Supervisor, Shift Supervisor, Supervising Manager, Operations Supervisor.

#### Nontraditional Occupation: Yes.

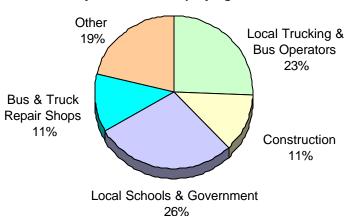
None of workers in survey responses were female.

**Turnover:** Moderate, 14% in the past 12 months.

<u>Unionization:</u> Yes. 28% of employers and 70% of employees were unionized.

#### WHERE THE JOBS ARE

Industry - Percent Employing



# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

<u>E'er Pays Al</u> l	Shared Cost	E'ee Pays All
41%	53%	0%
35%	35%	6%
29%	29%	6%
35%	24%	6%
59%	6%	0%
88%	6%	0%
47%	12%	6%
0%	0%	0%
	41% 35% 29% 35% 59% 88% 47%	41%       53%         35%       35%         29%       29%         35%       24%         59%       6%         88%       6%         47%       12%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

#### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, in-house promotion or transfer.

**Others include:** Walk-in applicants, Employment Development Department, job postings.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		
Not Difficult		
Few Employers Hire		X

Job Market for: Bus and Truck Mechanics

Experienced applicants: No competition in job search Inexperienced applicants: Very competitive in job search

#### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (99%) Bus and Truck Mechanics work full-time, 41 hours per week.

**Shifts:** Almost all employers (89%) report having day shifts. Some also have swing (39%) and some (22%) have graveyard shifts.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	 \$13.00	 \$13.00
New Hires, With Experience: Union:	\$7.00 - 14.00 \$11.50 - 17.78	\$12.00 \$12.00
After Three Years With the Firm: Union:	\$11.00 - 20.00 \$14.00 - 20.00	\$15.00 \$15.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 200

<u>Separations to 2004:</u>
\*Total Openings: 200
400

New Job Growth Rate: 15.3%\*. Projected growth is slower

than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

#### **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.
10 project employment to grow and 8 expect employment to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 203

#### **Key Terms:**

CARPENTERS OES 871020 Carpenters

perform the carpentry duties necessary to make or repair wooden structures, structural members and fixtures and equipment using carpentry tools and woodworking machines. Does not include Cabinetmakers and Bench Carpenters.

Alternate Job Titles: Apprentice / Journeyman Carpenter, Carpenter Piece Workers, Framers

Related DOT Codes: 860.381-022, 860.381-042, 860.664-010, 869.281-014

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a high school diploma or equivalent. A few have some college (but not necessarily a degree).

**Training:** Almost all firms sometimes allow training to substitute for work related experience. Employers prefer applicants who have 1 - 4 years of carpentry apprenticeship.

**Experience:** Many firms usually require related work experience.

They prefer 1 - 4 years experience as a construction trades worker, apprentice or

journeyman carpenter.

# **Skills rated "very important":**

Ability to work on a team

Provide own hand tools

Shop math skills

Ability to lift 50 lbs.

Ability to read and follow instructions

Rough and finished carpentry skills

Regular use of own vehicle

Ability to work independently

Ability to do strenuous, physically demanding work

Knowledge of safe workplace rules

Drug free workplace

Knowledge of steel stud framing

Knowledge of surveying

Computer - Laptop Usage

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to Leadperson, Foreperson, Operations Manager, Superintendent.

Nontraditional Occupation: Yes.

1% of workers in survey responses were female.

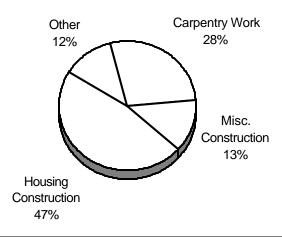
**Turnover:** Very low, 2% in the past 12 months.

**Unionization:** Yes. 13% of employers

and 16% of employees surveyed.

#### WHERE THE JOBS ARE

Industry - Percent Employing



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	54%
Vision Insurance:	46%
Life Insurance:	23%
Paid Sick Leave:	23%
Paid Vacation:	31%
Retirement Plan:	46%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Employee referral, unsolicited applicants, newspaper advertisements, in-house promotion or transfer, Employment Development Department, union hall referrals.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	<b>V</b>
Not Difficult		X

Job Market for: Carpenters

Experienced applicants: Somewhat competitive

*Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Carpenters work full-time, 40 hours per week. A few work part-time, 26 hours per week.

Hourly Wages	Range*	Median <sup>*</sup>
New Hires, No Experience:	\$6.00 - 10.00	\$7.25
New Hires, With Experience:	\$9.00 - 19.00	\$11.50
After Three Years With the Firm:	\$13.00 - 25.00	\$16.50

<sup>\*</sup> Union and non-union wages are combined in the above calculations.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment:
OES Growth Projections:

Very large - 7,202 and above
New jobs through 2004: 2,170
Separations to 2004: 1.120
\*Total Openings: 3,290

**New Job Growth Rate:** 27.2%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years due to increased volume of business and backlog of work.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 204

#### **Kev Terms:**

# CHEMICAL EQUIPMENT CONTROLLERS AND OPERATORS (BIO-TECHNOLOGY) 929350999

Chemical Equipment Controllers and Operators (Bio-Technology) control or operate equipment to control chemical changes or reactions in the processing of industrial or consumer products. Typical equipment used are reaction kettles, catalytic converters, continuous or batch treating equipment, saturator tanks, electrolytic cells, reactor vessels, recovery units and fermentation chambers.

For a more detailed analysis of Chemical Equipment Controllers and Operators see: Bio-process/Pilot Plant Technicians, page 22; and Chemical Process/Pilot Plant Technicians, page 24.

Alternate Job Titles: Staff Research Associates, Quality Control Associates, Production Chemists, Chemical Process Technicians, and Bio-process Development Technician.

Related DOT Codes: 012.261-014, 019.061-010, 078.261-014, 168.167-066, 559.664-014, 559.382-046

#### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

Education: Most recent hires have a bachelor degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with training in good manufacturing practices. They seek applicants with spreadsheet, database, word processing and Internet software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 2 years experience as a Chemical Process or Bio-process Technician, clean room, laboratory, or research experience.

# Skills rated "very important":

Ability to read and follow instructions

Record keeping skills

Knowledge of quality control guidelines

Ability to monitor gauges and signals

Ability to follow safe equipment operating practices

Ability to work as part of a team

Analytical and troubleshooting skills

Basic math skills

Ability to pay attention to detail

Ability to operate automated manufacturing equipment

Manual dexterity

Analytical and troubleshooting skills

Technical writing skills

Knowledge of aseptic process and cleanroom procedures

Oral communication skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Quality Control Supervisor, Group Leader, or other management positions.

Nontraditional Occupation: No.

41% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

**Unionization:** Yes. 12% of employers and 5% of employees were unionized.

# WHERE THE JOBS ARE

Industry -

Biotechnology Research
Chemical Products Manufacturing
Pharmaceutical and Drug Manufacturing
Temporary Staffing Agencies

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	76%
Vision Insurance:	65%
Life Insurance:	71%
Paid Sick Leave:	94%
Paid Vacation:	94%
Retirement Plan:	88%
Child Care:	6%

Other: 401-K Plan, Stock Options, Disability Insurance

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, private employment agencies, public school or program referrals, employee referrals, trade shows, and Internet web site.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	
A Little Difficult		Х
Not Difficult		

Job Market for: Chemical Equipment Controllers and Operators

Experienced applicants: Somewhat competitive

Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Chemical Equipment Controllers and Operators work full-time, 40 hours per week. Some work on a temporary or on-call basis, 40 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$10.00 - 16.75	\$13.43
New Hires, With Experience:	\$11.00 - 21.50	\$16.78
After Three Years With the Firm:	\$13.50 - 31.25	\$19.18

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

# **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.
14 project employment to grow and 3 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 202

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

The following definition is used by employers in the Bio-technology industry and is a subset of Chemical Equipment Controllers and Operators.

#### **BIO-PROCESS/PILOT PLANT TECHNICIANS**

Bio-process/Pilot Plant Technicians are responsible for the successful completion of bio-process activities as required to maintain production levels in compliance with GMPs (good manufacturing practices) involved in cell cultures. They assist in writing production procedures as necessary.

Alternate Job Titles: Staff Research Associates, Quality Control Associates, Bio-Process Development Technicians

**Related DOT Codes:** 012.261-014, 078.261-014, 168.167-066

#### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have a bachelor degree. A few have an associate degree or some college (but not necessarily a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Employers provide 1 - 3 months training in good manufacturing practices (GMP) and the use of analytical equipment. Employers prefer applicants with spreadsheet, database, word processing, and Internet software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 2 years prior experience as a Quality Control Technician, Bio-Process Technician, or Staff Research Associate.

# Skills rated "very important":

Ability to read and follow instructions and pay attention to detail

Ability to follow safe equipment operating practices

Knowledge of quality control guidelines

Ability to monitor gauges and signals

Ability to work independently or as part of a team

Record keeping skills

Knowledge of proper disposal of chemical waste

Oral communication skills

Ability to operate automated manufacturing equipment

Knowledge of automated manufacturing processes

Manual dexterity

Analytical and troubleshooting skills

Basic math skills

Technical writing skills

Knowledge of aseptic process and cleanroom procedures

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Staff Associate, Senior Research Associate, Supervisor, and Manager.

Nontraditional Occupation: No.

64% of workers in survey responses were female.

**Turnover:** Moderately low, 9% in the past 12 months.

<u>Unionization:</u> Yes. 14% of employers and 9% of employees were unionized.

WHERE THE JOBS ARE Industry -

Biotechnology Research Pharmaceutical and Drug Manufacturing Temporary Staffing Agencies

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	71%
Vision Insurance:	71%
Life Insurance:	71%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	86%
Child Care:	14%

Other: 401-K Plan, Disability Insurance, Stock Options

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, Public school and program referrals, private employment agencies, employee referrals, trade shows, Internet web site, and college bulletin boards.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	
A Little Difficult		
Not Difficult		Х

Job Market for: **Bio-process/Pilot Plant Technicians** *Experienced* applicants: **Somewhat competitive** *Inexperienced* applicants: **Very competitive** 

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Half the Bio-process/Pilot Plant Technicians work full-time, 40 hours per week. The other half work on a temporary or on-call basis, 40 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$11.50 - 15.50	\$13.43
New Hires, With Experience:	\$12.00 - 20.00	\$17.98
After Three Years With the Firm:	\$13.50 - 23.75	\$19.18

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

# **Employer Responses and Employment Outlook:**

7 employers provided data to develop this profile.
6 project employment to grow and 1 expects employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 202

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

The following definition is used by employers in the Bio-technology industry and is a subset of Chemical Equipment Controllers and Operators.

#### CHEMICAL PROCESS/PILOT PLANT TECHNICIANS

Chemical Process/Pilot Plant Technicians assist in the successful production of chemical and bio-chemical products. They operate chromatography equipment. They prepare solutions used in the isolation and purification process. They maintain records to comply with regulatory requirements, GMPs (good manufacturing practices) and standard operating processes.

Alternate Job Titles: Staff Research Associates, Quality Control Associates, Production Chemists, Chemical Process Technicians, and Scientists.

Related DOT Codes: 012.261-014, 019.061-010, 559.664-014, 559.382-046

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have a bachelor degree. Some have taken college courses (but not necessarily obtained a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with training in good manufacturing practices. They seek applicants with spreadsheet, database and word processing software skills.

**Experience:** Most firms usually require related work experience. They prefer applicants with 2 years experience as a Chemical Process or Bio-process Technician, clean room, laboratory, or research experience.

# **Skills rated "very important":**

Ability to read and follow instructions

Record keeping skills

Knowledge of quality control guidelines

Ability to monitor gauges and signals

Ability to follow safe equipment operating practices

Ability to work as part of a team

Analytical and troubleshooting skills

Ability to operate a computer

Basic math skills

Ability to pay attention to detail

Technical writing skills

Knowledge of aseptic process and cleanroom procedures

Instrumentation skills

Knowledge of combinational chemistry

Oral communication skills

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Quality Control Supervisor, Group Leader, or other management positions.

Nontraditional Occupation: No.

36% of workers in survey responses were female.

**Turnover:** Moderately high, 21% in the past 12 months.

**Unionization:** Yes. 10% of employers and 4% of employees were unionized.

# WHERE THE JOBS ARE

Industry -

Biotechnology Research Chemical Products Manufacturing Pharmaceutical and Drug Manufacturing Temporary Staffing Agencies

	Full-Time
Medical Insurance:	100%
Dental Insurance:	80%
Vision Insurance:	60%
Life Insurance:	70%
Paid Sick Leave:	90%
Paid Vacation:	90%
Retirement Plan:	90%

Other: 401-K Plan, Stock Options, Disability Insurance

### **Most Frequently Used Recruitment Methods:**

Private employment agencies, public school or program referrals, newspaper advertisements, employee referrals, trade shows, and Internet web site.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	
A Little Difficult		Х
Not Difficult		

Job Market for: Chemical Process/Pilot Plant Technicians

Experienced applicants: Somewhat competitive

Inexperienced applicants: Competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Chemical Process/Pilot Plant Technicians work full-time, 40 hours per week. A few work on a temporary or on-call basis, 40 hours per week.

Hourly Wages	Range *	Median*
New Hires, No Experience:	\$10.00 - 16.75	\$13.67
New Hires, With Experience:	\$12.00 - 21.50	\$16.18
After Three Years With the Firm:	\$14.75 - 31.25	\$19.09

<sup>\*</sup> Includes union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

# **Employer Responses and Employment Outlook:**

10 employers provided data to develop this profile.
8 project employment to grow and 2 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 202

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **CHEMISTS - EXCEPT BIOCHEMISTS**

**OES 241050** 

Chemists conduct chemical tests, qualitative and quantitative chemical analyses or chemical experiments in laboratories for quality or process control to develop new products or new knowledge. Does not include Biochemists.

Alternate Job Titles: Quality Control Chemist, Environmental Chemist, Junior Chemist, Research Associate

Related DOT Codes: 022.061-010, 022.261-010, 022.281-014

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All recent hires have a bachelor degree.

**<u>Training:</u>** Almost all firms never allow training to substitute for work experience. Employers prefer applicants with spreadsheet, word processing and database software skills.

**Experience:** Most firms usually require related work experience. They prefer to hire applicants with 1 - 4 years experience as a Chemist.

# **Skills rated "very important":**

Knowledge of health and safety procedures

Ability to work as a team member

Ability to read and follow instructions

Ability to operate laboratory equipment

Ability to concentrate and do detailed work

Ability to work independently

Ability to do research and analysis

Ability to solve technical problems

Oral communication skills

Computer literate

Ability to write technical reports

Knowledge of production and quality control

Knowledge of chromatography

Interpersonal skills

Ability to handle multiple tasks

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Chemist, Analytical Chemist.

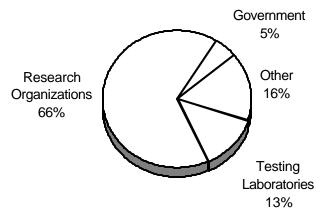
Nontraditional Occupation: No.

43% of workers in survey responses were female.

**Turnover:** Moderately low, 6% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	93%
Dental Insurance:	73%
Vision Insurance:	47%
Life Insurance:	60%
Paid Sick Leave:	87%
Paid Vacation:	93%
Retirement Plan:	60%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, public school or program referrals, unsolicited applicants, Workforce Partnership / Career Center referrals, chemists societies.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: Chemists

Experienced applicants: Competitive

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers indicated Chemists work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.75 - 19.00	\$13.75
New Hires, With Experience:	\$12.00 - 21.50	\$15.00
After Three Years With the Firm:	\$15.00 - 26.00	\$18.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 200

Separations to 2004: 100
\*Total Openings: 300

**New Job Growth Rate:** 35.1%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

**Employer Outlook on Employment :** Many responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 204

#### **Key Terms:**

# **CHILD CARE WORKERS**

**OES 680380** 

Child Care Workers attend children at school, businesses and institutions performing a variety of tasks, such as dressing, feeding, bathing and overseeing play. Does not include workers whose primary function is to teach in a structured setting.

Alternate Job Titles: Child Care Providers, Instructional Aides / Teachers

**Related DOT Codes:** 355.674-010, 359.677-010, 359.677-018, 359.677-026,

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have some college (but not necessarily a degree). Some have an associate degree.

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years of child care training with a Child Care Certificate and pass a health screening, including a TB test. Employers assist applicants in obtaining a fingerprint clearance and child abuse index check through Department of Justice.

**Experience:** Many firms always require related work experience. They prefer applicants with 1 - 2 years experience as a Child Care Worker or Teacher's Aide.

# **Skills rated "very important":**

Patience with children

Ability to work under pressure

Possess a clean driving record

Ability to work independently

Ability to read and follow instructions

Training in early child development

Ability to handle crisis situations

Oral reading skills

CPR and first aid skills

Positive attitude

Ability to work as a team member

Behavioral training

Training for children with special needs

Management skills

#### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Teacher or Assistant Director with additional education.

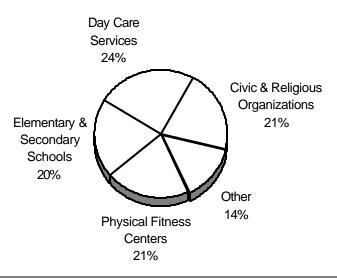
#### Nontraditional Occupation: No.

92% of workers in survey responses were female.

**Turnover:** Moderate, 17% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	80%
Dental Insurance:	53%
Vision Insurance:	27%
Life Insurance:	33%
Paid Sick Leave:	80%
Paid Vacation:	87%
Retirement Plan:	40%
Child Care:	67%

Other: Tuition reimbursement (full or partial)

#### **Most Frequently Used Recruitment Methods:**

Employee referral, unsolicited applicants, newspaper advertisements, in-house promotion or transfer, public school or program referrals, private school referrals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	
A Little Difficult		X
Not Difficult		

Job Market for: Child Care Workers

Experienced applicants: Somewhat competitive

*Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

Average Weekly Hours: Most Child Care Workers work full-time, 40 hours per week. Some work part-time, 21 hours per week or on a temporary or on-call basis, 14 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.00 - 9.50	\$6.25
New Hires, With Experience:	\$6.00 - 12.00	\$7.00
After Three Years With the Firm:	\$6.50 - 15.00	\$9.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323
OES Growth Projections: New jobs through 2004: 800
Separations to 2004: 230
\*Total Openings: 420

**New Job Growth Rate:** 31.0%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 205

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### CIVIL ENGINEERING TECHNICIANS AND TECHNOLOGISTS

**OES 225020** 

Civil Engineering Technicians and Technologists apply the theory and principles of civil engineering in planning, designing and overseeing the construction and maintenance of structures and facilities, under the direction of engineering staff and physical scientists.

Alternate Job Titles: Junior Engineer, Associate Engineer, Design Engineer, Engineer in Training

**Related DOT Codes:** 005.261-014, 005.281-010

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a bachelor degree.

**Training:** Many firms usually allow training to substitute for work experience. Employers prefer applicants with CAD drafting (Auto Cad, Micro Station), word processing and spreadsheet software skills.

**Experience:** Most firms sometimes require related work experience.

They prefer applicants with 2 years experience as an intern, technician, assistant or associate engineer.

### Skills rated "very important":

Ability to read and follow instructions

Problem solving skills

Ability to concentrate and do detailed work

Ability to operate a computer

Ability to read maps

Ability to work under pressure and meet deadlines

Ability to do precision work

Oral communication skills

Ability to draft working drawings

Ability to do research

Ability to estimate construction costs

Knowledge of construction and survey methods

Health and safety training

Advanced CAD training

Customer service

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Licensed Civil Engineer, Senior Designer.

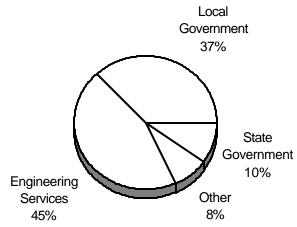
Nontraditional Occupation: Yes.

24% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	71%
Vision Insurance:	47%
Life Insurance:	71%
Paid Sick Leave:	94%
Paid Vacation:	100%
Retirement Plan:	76%
Other: 401-K Plan, Profit S	haring

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, public school or program referrals, employee referrals, in-house promotion or transfer, career fairs, engineering associations, internships.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Civil Engineering Technicians

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Civil Engineering Technicians and Technologists work full-time, 42 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.00 - 17.75	\$13.00
New Hires, With Experience:	\$12.00 - 18.50	\$15.00
After Three Years With the Firm:	\$14.00 - 21.75	\$17.75

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

OES Growth Projections:

New jobs through 2004: 80

Separations to 2004: 70

\*Total Openings: 230

**New Job Growth Rate:** 15.7%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Almost all responding employers project employment to grow over the next three years because of increased business and continued growth of the economy.

**Employer Responses:** 17 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 206

#### **Key Terms:**

# CIVIL ENGINEERS OES 221210

Civil Engineers perform a variety of engineering work in planning, designing, and overseeing construction and maintenance of structures and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. This includes Traffic Engineers who specialize in studying vehicular and pedestrian traffic conditions.

<u>Alternate Job Titles:</u> Associate Civil Engineer, Junior Civil Engineer, Project Engineer, Resident Engineer, Civil Designers, Bridge Engineer/Designer, Design Engineer, Remediation Engineer, City Engineer

Related DOT Codes: 005.061-014, 005.061-038, 005.167-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

Education: All firms (100%) require a bachelor degree.

**Training:** Some firms (20%) allow training to substitute for work experience and some (26%) require technical or vocational training. Employers prefer applicants with word processing and spreadsheet software skills as well as the ability to use CAD or Autocad systems. (Employers reported using Intergraph and Microstation software).

**Experience:** Most firms (63%) require 2 - 5 years related work experience. Few (15%) accept other occupational experience and they prefer 5 years experience in design and construction.

### **Skills rated "very important":**

Ability to solve complex engineering problems

Ability to read and follow instructions

Ability to develop written recommendations/writing skills

Ability to read and analyze maps, drawings, blueprints and aerial photographs

Ability to work under pressure

Ability to work on or manage a team

Oral communication skills

Ability to work independently

Advanced math skills

Ability to write technical material

Possession of a valid drivers license

Registered by the State Board of Professional Engineers

Familiar with computer-assisted engineering design software

Leadership and management skills

CAD drafting and computer graphic skills

Interpersonal skills

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Assistant Design Engineer, Lead Engineer, Senior Engineer, Assistant Project Engineer, Senior Bridge Designer, Project Manager, Supervising Engineer, Senior Associate Engineer, Company Vice President.

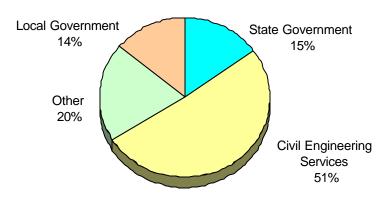
### Nontraditional Occupation: Yes.

10% of workers in survey responses were female.

**Turnover:** Moderately low, 10% in the past 12 months.

<u>Unionization:</u> Yes. 26% of employers and 21% of employees were unionized.

# WHERE THE JOBS ARE



## FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	<u>E'ee Pays All</u>
Medical Insurance:	68%	32%	0%
Dental Insurance:	63%	32%	5%
Vision Insurance:	58%	21%	0%
Life Insurance:	63%	26%	11%
Paid Sick Leave:	84%	11%	0%
Paid Vacation:	89%	11%	0%
Retirement Plan:	63%	32%	5%
Child Care	5%	11%	0%

Other: Education reimbursment, paid holidays, long term disability, deferred compensation plan.

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, trade journals, employee referrals.

Others include: Colleges and universities, internet.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Civil Engineers

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

#### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (97%) Civil Engineers work full-time, 42 hours per week. A few (3%) work part-time, 28 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$12.00 - 18.63 \$15.05 - 15.32	\$16.74 \$15.19
New Hires, With Experience: Union:	\$14.62 - 23.97 \$16.25 - 25.68	\$18.75 \$21.00
After Three Years With the Firm: Union:	\$18.70 - 33.56 \$18.79 - 32.37	\$24.29 \$24.71

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 330

Separations to 2004: 320

\*Total Openings: 650

**New Job Growth Rate:** 18.4%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

## **Employer Responses and Employment Outlook:**

19 employers provided data to develop this profile.
10 project employment to grow and 9 expect employment to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 206

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

<sup>\*7</sup> Year period 1997 through 2004.

### **COMPUTER ENGINEERS**

### **OES 221270**

Computer Engineers analyze data processing requirements to plan EDP systems to provide system capabilities required for projected work loads. They plan layout and installation of new systems or modification of existing systems. They may set up and control analog or hydrid computer systems to solve scientific and engineering problems.

Alternate Job Titles: Business Applications Engineer, Systems Analyst, Systems Engineer, Systems Integrater, Hardware Engineer, Engineer Analyst, Information Analysts, Applications Systems Engineer, Applications Developer, Network Systems Engineer

Related DOT Codes: 033.167-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms (56%) require a bachelor degree. Some (25%) require an associate degree.

**Training:** Many firms (50%) allow 12 - 24 months of training in computer maintenance operations or have network certification to substitute for work experience. Employers prefer applicants with word processing, spreadsheet and database computer software skills.

**Experience:** Most firms (69%) require 2 - 6 years related work experience or 1 - 3 years experience in systems analysis, computer networking, or computer operations.

## Skills rated "very important":

Knowledge of computer hardware and software systems

Ability to pay attention to detail

Ability to work as a team

Ability to meet deadlines

Ability to read and follow instructions

Oral communication skills

Ability to work independently

Problem solving skills

Ability to work under pressure

Knowledge of computer design

Knowledge of micro and mainframe computer systems

Analytical skills

Computer programming skills

Knowledge of LAN/WAN systems

Possess a high level of theoretical expertise

Ability to write technical material

Multi-tasking skills

#### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Senior PC/Lan Specialist, Senior Engineer, Senior Network Engineer, Program Manager, Senior Computer Architect, Lead Engineer, Senior Systems Analyst, Applications Systems Analyst, Supervising Engineer.

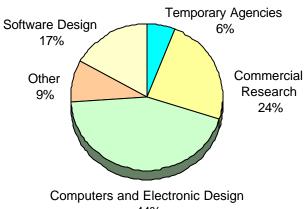
**Nontraditional Occupation:** Yes.

23% of workers in survey responses were female.

**Turnover:** Moderate, 15% in the past 12 months.

**Unionization:** None reported.

# WHERE THE JOBS ARE



44%

## FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	<u>E'ee Pays All</u>
Medical Insurance:	50%	50%	0%
Dental Insurance:	44%	50%	0%
Vision Insurance:	31%	25%	6%
Life Insurance:	38%	38%	6%
Paid Sick Leave:	81%	6%	0%
Paid Vacation:	94%	6%	0%
Retirement Plan:	63%	19%	0%
Child Care	0%	6%	0%

Other employer specified: 401-K Plan, Education Reimbursement, 125 Spending Plan, Short and Long Term Disability, Stock Purchase Plan

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, internet, employee referrals.

Others include: Colleges and universities, professional networking.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Computer Engineers

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (94%) Computer Engineers work full-time, 42 hours per week. A few (6%) work part-time, 24 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$12.00 - 16.78	\$14.92
New Hires, With Experience:	\$11.51 - 21.58	\$17.16
After Three Years With the Firm:	\$14.49 - 33.56	\$21.69

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 2,440
Separations to 2004: 200

\*Total Openings: 2,640

**New Job Growth Rate:** 66.1%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

8 project employment to grow, 7 expect employment to remain stable, and 1 expects employment to decline over the next two years.

Education / Training Providers: See Appendix A, page 206

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# COMPUTER PROGRAMMERS - INCLUDING AIDES

## **OES 251051**

Computer Programmers, Including Aides convert symbolic statements of administrative data, business, scientific, engineering and other technical problem formulations into detailed logical flow charts for coding into computer language. They develop and write computer programs to store, locate and retrieve specific documents, data, and information.

Alternate Job Titles: Programmer Analysts, Applications Developers, Software Engineers, Programmer Engineers

Related DOT Codes: 030.162-010

#### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree. Some have completed a graduate studies degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet, database and Internet software skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 1 - 4 years experience as a Programmer Analyst, Software Developer/Engineer, or Database Developer.

### **Skills rated "very important":**

Ability to work as part of a team

Knowledge of software applications

Ability to debug computer programs

Ability to work under pressure

Detail oriented and ability to think logically

Ability to work independently

Ability to concentrate for long periods of time

Knowledge of Visual Basic, C, C++

Oral communication and presentation skills

Knowledge of minicomputer hardware and operating systems

Knowledge of UNIX and SQL databases

Ability to write testing programs

Knowledge of hardware configurations and PC work stations

Ability to write technical material

Knowledge of graphics programming

Knowledge of Delphi, 4th Generation and Java programming languages

Knowledge of client/server environments

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Programmer, Systems Analyst, and Project Manager.

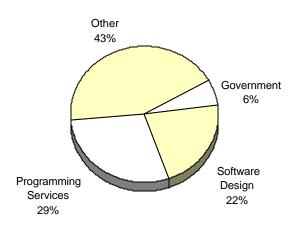
Nontraditional Occupation: Yes.

14% of workers in survey responses were female.

**Turnover:** Moderately low, 10% in the past 12 months.

**Unionization:** None reported

# WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	100%	6%
Dental Insurance:	94%	6%
Vision Insurance:	69%	
Life Insurance:	88%	
Paid Sick Leave:	88%	
Paid Vacation:	100%	
Retirement Plan:	94%	6%
Child Care:	13%	

Other: 401-K Plan, Stock Purchase Plan, Tuition Reimbursement

#### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer, public school or program referrals, and Internet web sites.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Computer Programmers

Experienced applicants: Somewhat competitive

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Computer Programmers work full-time, 43 hours per week. Some work on a temporary or on-call basis, 40 hours per week. A few work part-time, 28 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.00 - 19.25	\$14.65
New Hires, With Experience:	\$11.50 - 28.75	\$19.18
After Three Years With the Firm:	\$14.50 - 36.00	\$23.44

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 1,430

Separations to 2004: 1,570

\*Total Openings: 3,000

**New Job Growth Rate:** 13.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

10 project employment to grow and 6 expect employment to remain stable over the next three years.

**Education / Training Providers:** See Appendix A, page 207

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

**CONCIERGES** 352177999

Concierges are staff members of businesses such as: hotels, hospitals, or resorts. They assist guests of the facility with personal needs by utilizing knowledge of the facilities, local merchants and attractions. They make reservations; arrange tours and local transportation; make referrals to local restaurants, amusements, medical facilities, churches, theatres, libraries, museums and child care providers. They may obtain tickets for guests to social and recreational events or for travel. They may assist with special requests and business needs of guests regarding: conference calls, luggage, mail, computer usage and other guest services.

Alternate Job Titles: None reported Related DOT Codes: None reported

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have some college (but not necessarily a degree).

**Training:** Most firms sometimes allow training to substitute for work experience. Many employers provide on-the-job training. They prefer applicants with word processing, database, desktop publishing and Internet software skills.

**Experience:** Many firms sometimes require related work experience. They prefer applicants with 12 - 15 months experience as a Hotel Front Desk Clerk, Hotel Sales Representative or Public Relations Representative.

### Skills rated "very important":

Public contact and customer service skills

Well groomed

Oral communication skills

Ability to assist guests with personal needs

Ability to read and follow instructions

Map reading skills and ability to give directions

Willingness to work nights, weekends and holidays

Ability to work independently

Familiar with local tourist attractions

Familiar with local shopping and retail merchants

Ability to assist with guest transportation needs (car rental)

Familiar with local restaurants and eating establishments

Ability to arrange tours

Knowledge of employer policies and operation procedures

Knowledge of local churches and hospitals

Knowledge of emergency first aid

Knowledge of child care providers

Computer literate

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Chief Concierge, Front Desk Supervisor, Sales Manager, and Marketing Representative.

Nontraditional Occupation: No.

72% of workers in survey responses were female.

**Turnover:** Moderately high, 28% in the past 12 months.

**Unionization:** None reported

#### WHERE THE JOBS ARE

Industry -

Car Rental Agencies, Hotels, Resorts and Spas, Tour Operators

### Occupational Note:

Concierges appear to have multiple levels of professionalism. One consists of employment in "up-scale" hotels and resorts which pride themselves on customer service and personal accommodations delivered by their Concierges staff. The Concierges take great pride in their occupation and consider it a career. Many are members of the local San Diego Concierge Association and/or the international association of Les Clefs D'Or, USA Ltd. Another level consists of employment at large "chain" hotels which also provide excellent customer service and outstanding accommodations. The position is often viewed as a step on the career ladder, though many in the position were very satisfied being a Concierge. Another level currently emerging is the contracting out of concierge services to related businesses such as auto rental agencies or tour companies. A more recent entrant in the field is the offering of concierge type services and activities to area visitors and guests using Internet web sites.

	<u>Full-Time</u>	Part-Time
Medical Insurance:	100%	27%
Dental Insurance:	100%	27%
Vision Insurance:	53%	20%
Life Insurance:	73%	27%
Paid Sick Leave:	67%	27%
Paid Vacation:	93%	27%
Retirement Plan:	73%	20%

Other: 401-K Plan, Profit Sharing

### **Most Frequently Used Recruitment Methods:**

Employee referrals, in-house promotion or transfer, newspaper advertisements, unsolicited applicants, job hot lines, and college campus recruitment office.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	Х
A Little Difficult		
Not Difficult		

Job Market for: Concierges

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

**Average Weekly Hours:** Approximately half the Concierges work full-time, 38 hours per week and the other half work part-time, 27 hours per week.

Hourly Wages	Range *	Median
New Hires, No Experience:	\$6.00 - 8.00	\$7.25
New Hires, With Experience:	\$6.75 - 9.00	\$8.00
After Three Years With the Firm:	\$6.75 - 12.00	\$9.79

<sup>\*</sup> Range could increase \$1.00 - \$2.00 if tips are included.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
8 project employment to grow and 8 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 208

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **CORRECTION OFFICERS AND JAILERS**

### **OES 630170**

Correction Officers and Jailers guard inmates in penal or rehabilitative institutions in accordance with established regulations and procedures. They may guard prisoners in transit between jail, courtroom, prison, or other point, traveling by automobile or public transportation, and may be designated deputy guard. This occupation includes Deputy Sheriffs who spend the majority of their time guarding prisoners in county correctional institutions.

Alternate Job Titles: Corrections Deputy, Correctional Officer, Watch Guards, Correctional Deputy Probation Officers

Related DOT Codes: 372.367-014, 372.667-018

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (80%) require a high school diploma or equivalent. Some (20%) require a bachelor degree.

**Training:** No firms allow vocational training to substitute for work experience. Most (40%) require vocational or technical training and prefer applicants trained in criminal justice or social science.

**Experience:** Most firms (60%) do not require related work experience. Those that do, prefer 24 - 36 months experience in military security, social work, supervisory or management positions; but responding employers report rarely hiring experienced applicants.

# **Skills rated "very important":**

Oral communication skills

Ability to read and follow instructions

Ability to work under pressure and handle crisis situations

U.S. citizen and 21 years of age

Ability to pass pre-employment drug screening

Ability to observe and report on prisoner activity

Ability to work independently

No felony convictions

Ability to stand continuously for 2 or more hours

Willingness to work nights, weekends, holidays and overtime

Training in criminal justice, police science or criminology

Ability to apply force to maintain discipline

Ability to pass a pre-employment medical exam

Ability to pass a physical performance test

Ability to pass pre-employment written and/or oral exams

Willingness to work with close supervision

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Deputy Sheriff, Training Officer, Senior Probation Officer, Counselor, Watch Captain, Sergeant, Lieutenant, Associate Warden.

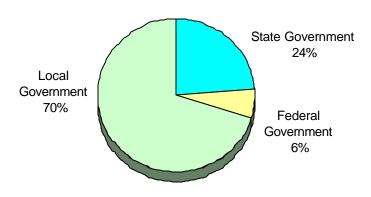
Nontraditional Occupation: Yes.

25% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

<u>Unionization:</u> Yes. 80% of employers and 99% of employees were unionized.

# WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	E'ee Pays Al
Medical Insurance:	40%	40%	20%
Dental Insurance:	40%	40%	20%
Vision Insurance:	40%	40%	20%
Life Insurance:	40%	40%	20%
Paid Sick Leave:	60%	40%	0%
Paid Vacation:	60%	40%	0%
Retirement Plan:	40%	60%	0%
Child Care	0%	20%	0%

Other employer specified: 401-K Plan, Uniform Allowance,

Overtime Pay, Annual Bonus

#### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, walk-in applicants, internet.

Others include: Job postings, hotline, state government recruitment.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult		
Not Difficult		Х
Few Employers Hire	Х	

Job Market for: Correction Officers and Jailers
Experienced applicants: Very competitive job search
Inexperienced applicants: Very competitive job search

### **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Almost all (96%) Correction Officers and Jailers work full-time, 42 hours per week. A few (4%) work on a temporary or on-call basis, 40 hours per week.

**Shifts:** All employers (100%) report having day, swing and graveyard shifts.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$8.17 \$11.07 - 14.94	\$8.17 \$12.24
New Hires, With Experience: Union:	\$10.12 \$11.07 - 14.94	\$10.12 \$14.21
After Three Years With the Firm: Union:	\$12.24 \$12.20 - 20.02	\$12.24 \$15.70

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323
OES Growth Projections: New jobs through 2004: 500
Separations to 2004: 240

<u>Separations to 2004:</u>
\*Total Openings: 240
740

**New Job Growth Rate:** 23.5%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

5 employers provided data to develop this profile.

3 project employment to remain stable, 1 expects employment to grow; and 1 expects employment to decline over the next two years.

**Education / Training Providers:** See Appendix A, page 208

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

### **CUSTOMER SERVICE REPRESENTATIVES**

## 553350998

Customer Service Representatives talk with customers to find solutions to customers' problems. They may work at a professional or clerical level. Customer Service Representatives at clerical levels deal with complaints about products or billing or receive orders for products or services. Representatives at professional levels most often are employed with companies selling complex products, such as computers. They answer questions and investigate and correct errors. They may train customers in the use of the product or interpret customer needs to technical staff.

Alternate Job Titles: Customer Service Agents, Customer Service Support Technicians, Technical Support Systems Specialists

Related DOT Codes: 205.362-026, 238.367-026, 239.362-014

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Many recent hires have a high school diploma or a bachelor degree. A few have some college (but not necessarily a degree).

<u>Training:</u> Many firms never allow training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet and Internet software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 6 months - 2 years experience as a Retail Sales Clerk, Customer Service Representative or Sales and Marketing Representative.

# **Skills rated "very important":**

Oral communication skills

Interpersonal skills

Ability to deal with angry customers

Ability to resolve customer complaints

Ability to read and follow instructions

Telephone answering skills

Ability to operate a computer

Customer service skills

Ability to work independently

Willingness to work nights weekends and holidays

Ability to explain technical material over the phone

Record keeping skills

Ability to read and interpret technical manuals

Willingness to work with close supervision

Basic math skills

Troubleshooting skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Customer Service Representative, Supervisor, Manager, and Sales or Marketing Representative.

#### Nontraditional Occupation: No.

53% of workers in survey responses were female.

**Turnover:** Moderately high, 29% in the past 12 months.

<u>Unionization:</u> Yes. 5% of employers and 14% of employees were unionized.

# WHERE THE JOBS ARE

Industry -

Jobs can be found in all industries both public and private such as:

Airlines

Banks and Credit Unions

**Escrow Companies** 

Insurance Companies

Major Retail and Wholesale Companies

Manufacturing Companies

Software & Hardware Developers

Staffing Agencies

Utility Companies

	<u>Full-Time</u>	Part -Time
Medical Insurance:	100%	21%
Dental Insurance:	89%	21%
Vision Insurance:	53%	11%
Life Insurance:	95%	16%
Paid Sick Leave:	95%	21%
Paid Vacation:	100%	21%
Retirement Plan:	84%	16%
Child Care:	5%	5%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, unsolicited applicants, in-house promotion or transfer, Internet, career fairs, and private travel schools.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: Customer Service Representatives

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Most Customer Service Representatives work full-time, 40 hours per week. A few work part-time, 26 hours per week. A few also work on a temporary or on-call basis, 32 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 17.25	\$8.00
New Hires, With Experience:	\$7.25 - 20.50	\$9.50
After Three Years With the Firm:	\$8.00 - 27.50	\$11.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

19 employers provided data to develop this profile.

10 project employment to grow and 9 expect employment to remain stable over the next three years.

**Education / Training Providers:** See Appendix A, page 208

#### **Kev Terms:**

### **DATA BASE ADMINISTRATORS**

**OES 251030** 

Data Base Administrators coordinate physical changes to computer data bases and code, test, and implement the data base applying knowledge of data base management systems. May design logical and physical data bases and coordinate data base development as part of a project team.

<u>Alternate Job Titles:</u> Data Processing Consultants, Computer Specialists, Computer Systems Administrator, Data Resource Specialist, Systems Analyst, Computer Information Specialist.

Related DOT Codes: 039.162-010, 039.162-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (56%) require a bachelor degree. Many (44%) require an associate degree.

**Training:** All firms (100%) do not allow training to substitute for work experience. A few (6%) require vocational training. Employers prefer applicants with database, word processing, and spreadsheet computer software skills. Employers reported using Filemaker Pro, Informix, Oracle, MS Access and other SQL database software.

**Experience:** Almost all firms (94%) require 1-5 years related work experience or 1 - 2 years experience in Programming or as a Networking/Systems Analyst or Electronic Program Specialist. Responding employers report rarely hiring inexperienced applicants.

### **Skills rated "very important":**

Knowledge of data base management

Ability to work under pressure

Detail oriented

Ability to think logically

Problem solving skills

Ability to work independently

Ability to read and follow instructions

Analytical skills

Ability to work as part of a team

Oral communication skills

Knowledge of computer hardware and software systems

Ability to concentrate for long periods of time

Computer programming skills

Ability to sit for long periods of time

Continuous learning

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Computer Support Specialist, Data Resource Manager, Senior Administrator, Data Base Manager/Director, Database Analyst, Systems Analyst.

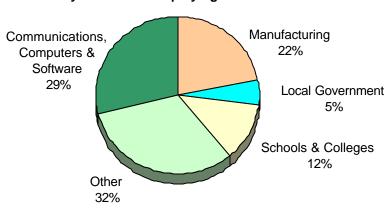
#### Nontraditional Occupation: No.

42% of workers in survey responses were female.

**Turnover:** Moderate, 14% in the past 12 months.

**Unionization:** None reported.

#### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>
Medical Insurance:	44%	50%
Dental Insurance:	31%	56%
Vision Insurance:	19%	25%
Life Insurance:	44%	31%
Paid Sick Leave:	69%	19%
Paid Vacation:	75%	19%
Retirement Plan:	63%	19%
Child Care	6%	0%

Other employer specified: 401-K Plan, Cafeteria Plan, Stock Options, Deferred Compensation Plan, Disability Insurance, Profit Sharing

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, internet.

**Others include:** Colleges and universities, in-house promotions or transfer, job fairs, San Diego Career Center Network.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		
Not Difficult		
Few Employers Hire		Х

Job Market for: Data Base Administrators

Experienced applicants: No competition in job search Inexperienced applicants: Very competitive job market

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> All (100%) Data Base Administrators work full-time, 42 hours per week.

Shifts: All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$13.42	\$13.42
New Hires, With Experience:	\$12.79 - 21.58	\$15.79
After Three Years With the Firm:	\$16.78 - 28.33	\$20.78

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 330

<u>Separations to 2004:</u> \*Total Openings: 450

New Job Growth Rate: 46.5%\*. Projected growth is much faster

than the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

9 project employment to remain stable and 7 expect employment to grow over the next two years.

**Education / Training Providers:** See Appendix A, page 208

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **DENTAL HYGIENISTS**

### **OES 329080**

Dental Hygienists perform dental prophylactic treatments and instruct groups and individuals in the care of the teeth and mouth.

Alternate Job Titles: Registered Dental Hygienist, Board Certified Dental Hygienist

Related DOT Codes: 078.361-010

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a bachelor degree. A few have an associate degree.

**Training:** Many firms usually allow training to substitute for work related experience. Employers prefer applicants with 2 - 4 years of training and the required Dental Hygienist License from the State Board of Dental Examiners.

**Experience:** Many firms always require related work experience. They prefer to hire applicants with 1 - 2 years experience as a Dental Hygienist.

# **Skills rated "very important":**

Possession of a State Dental Hygienist License
Oral communication skills
Knowledge of clinical procedures
Public contact and customer service skills
Radiation safety certificate
Ability to write legibly
Knowledge of anesthesiology
Ability to work independently
Record keeping skills
Ability to work on a team

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Dentist with additional education.

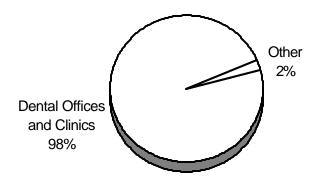
**Nontraditional Occupation:** No.

93% of workers in survey responses were female.

**Turnover:** Moderate, 15% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	92%
Dental Insurance:	92%
Vision Insurance:	25%
Life Insurance:	33%
Paid Sick Leave:	67%
Paid Vacation:	75%
Retirement Plan:	25%

Other: 401-K Plan

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, unsolicited applicants, employee referrals, other dental offices.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: **Dental Hygienists** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many work part-time 20 hours per week. Some Dental Hygienists work full-time, 39 hours per week.

Hourly Wages	Range *	Median*
New Hires, No Experience:	\$25.00 - \$30.00	\$30.00
New Hires, With Experience:	\$30.00 - \$32.00	\$30.50
After Three Years With the Firm:	\$30.00 - \$32.00	\$31.00

<sup>\*</sup> The wages above are typically paid on a per day basis according to industry trends.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 330

Separations to 2004: 300

\*Total Openings: 630

**New Job Growth Rate:** 24.3%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment</u>: Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

**Education / Training Providers:** See Appendix A, page 210

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **DIETETIC TECHNICIANS**

# **OES 325230**

Dietetic Technicians provide service in assigned areas of food service management. They teach principles of food and nutrition and provide dietary counseling under direction of Dieticians.

Alternate Job Titles: Dietary Assistants, Nutrition Assistants

Related DOT Codes: 077.124-010

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have an associate degree. Some have completed college courses, (but not necessarily obtained a degree).

**Training:** Many firms usually allow training to substitute for work experience. Employers prefer applicants with an associate degree and have passed the National Dietetic Technicians registration exam administered by the American Dietetic Association resulting in a Dietetic Technician Registered (DTR) and have word processing and database software skills.

**Experience:** Many firms sometimes require related work experience. They prefer applicants with 6 - 12 months experience as a Dietetic Technician/ Aide or Assistant, Nutrition Assistant or Food Service Worker.

# **Skills rated "very important":**

Oral communication skills

Read and follow instructions

Ability to write legibly

Knowledge of sanitary and safety procedures

Ability to conduct dietary research

Basic math and record keeping skills

Ability to work independently

Ability to modify menus because of dietary restrictions

Knowledge of good diet and nutrition

Knowledge of food science and food service management

Ability to supervise meal preparation

Ability to teach principles of food and nutrition

Ability to evaluate dietary history

Ability to plan menus and nutritional programs

Knowledge of vitamin supplements

Counseling, interpersonal and customer service skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Diet Assistant II, III, Nutritionist, Nutrition Supervisor, and Food Service Director.

Nontraditional Occupation: No.

70% of workers in survey responses were female.

**Turnover:** Moderately high, 22% in the past 12 months.

**Unionization:** None reported

#### WHERE THE JOBS ARE:

Hospitals Medical Clinics Nursing Care Facilities Nutritional Consultants

	Full-Time	Part-Time
Medical Insurance:	100%	7%
Dental Insurance:	100%	7%
Vision Insurance:	87%	7%
Life Insurance:	93%	
Paid Sick Leave:	87%	
Paid Vacation:	93%	
Retirement Plan:	60%	
Childcare:	7%	

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Public school or program referrals, newspaper advertisements, in-house promotion or transfer, unsolicited applicants, and local dietetic association.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	Х
A Little Difficult		
Not Difficult		

Job Market for: Dietetic Technicians

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Dietetic Technicians work full-time, 40 hours per week. A few work part-time, 23 hours per week or on a temporary or on-call basis, 17 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 13.50	\$10.00
New Hires, With Experience:	\$6.00 - 14.50	\$11.00
After Three Years With the Firm:	\$9.00 - 15.25	\$13.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Small - Less than 1,662 **OES Growth Projections:** New jobs through 2004:

New jobs through 2004: 30
Separations to 2004: 30
\*Total Openings: 50

New Job Growth Rate: 12.5%\*. Projected growth is slower than

the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.

12 expect employment to remain stable and 5 project employment to grow over the next three years.

**Education / Training Providers:** See Appendix A, page 210

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **EDUCATION ADMINISTRATORS**

# **OES 150050**

Education Administrators plan, organize, direct, control or coordinate the educational activities of colleges, universities, vocational, technical, post-secondary, secondary or elementary schools. This includes administrators of separate training and instructional organizations (or programs) in private business or other agencies.

Alternate Job Titles: Principal / Assistant Principal, Vocational Education Coordinators, Director of Education, Vice President of Academic Affairs, Employment and Training Director

**Related DOT Codes:** 091.107-101, 097.167-010, 099.117-018, 099.117-030

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree. Many have completed graduate studies.

**Training:** Most firms never allow training to substitute for work experience. Employers prefer applicants with an educational administrative services credential and word processing, spreadsheet and database computer software skills.

**Experience:** Almost all firms always require related work experience. They prefer applicants with 1 - 4 years experience as a Education Administrator or Instructor.

# Skills rated "very important":

Ability to develop academic policies

Ability to evaluate academic programs

Oral communication and verbal presentation skills

Interpersonal skills

Staff supervision and evaluation skills

Ability to motivate teachers and other staff

Ability to coordinate activities of school faculty

Ability to work under pressure

Management and leadership skills

Knowledge of funding sources and grant writing skills

Ability to set curriculum standards

Ability to prepare budgets

Ability to manage school-community relations

Ability to oversee career counseling programs

Ability to use computers

Knowledge of various cultural backgrounds

Knowledge of computerized accounting

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: School Director, Assistant Superintendent, and Chief Operating Officer.

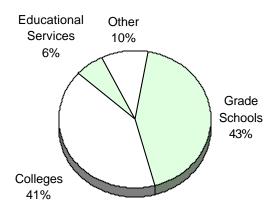
Nontraditional Occupation: No.

47% of workers in survey responses were female.

**Turnover:** Moderately low, 10% in the past 12 months.

**Unionization:** None reported

#### WHERE THE JOBS ARE



Full-Time	Part-Time
93%	7%
87%	
60%	
67%	
100%	7%
87%	7%
80%	7%
	93% 87% 60% 67% 100% 87%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, Employment Development Departament, private employment agency, professional associations, and industry publications and newsletters.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: Education Administrators

Experienced applicants: Competitive

Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Education Administrators work full-time, 40 hours per week. A few work part-time, 16 hours per week or on a temporary or on-call basis, 15 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.50 - 32.75	\$13.70
New Hires, With Experience:	\$12.00 - 40.00	\$15.98
After Three Years With the Firm:	\$13.00 - 42.50	\$19.18

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

New jobs through 2004: 430

Separations to 2004: 1,230

\*Total Openings: 1.660

**New Job Growth Rate:** 12.6%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.\*
8 project employment to grow and 7 expect employment to remain stable over the next three years.
\*No responses were obtained from four-year Universities or Colleges, SIC 8221, and are not part of this analysis.

**Education / Training Providers:** See Appendix A, page 210

#### **Key Terms:**

## ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS and TECHNOLOGISTS OES 225050

Electrical and Electronic Engineering Technicians and Technologists apply electrical and electronic theory and related knowledge to design, build, test, repair and modify developmental, experimental or production electrical equipment in industrial or commercial plants for subsequent use by engineering personnel in making engineering design and evaluation decisions. This does not include workers who only repair electronic equipment.

Alternate Job Titles: Engineering Technicians, Production Line Manufacturing Technicians, Test Technicians, Quality Control/Assurance Technicians

**Related DOT Codes:** 003.161-010, 003.161-014, 003.261-010, 019.281-010

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have an associate degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with an Electronics Technician Certificate and have word processing, spreadsheet and database software skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 2 - 3 years experience as a Engineering Technician, Electrical Laboratory Technician, Quality Control Technician or Test Technician.

# **Skills rated "very important":**

Troubleshooting skills

Ability to apply principles of electrical and electronic theory

Ability to operate electrical and electronics testing equipment

Ability to read and follow instructions

Ability to work independently

Ability to read technical manuals

Ability to work as part of a team

Ability to read schematics

Analytical skills

Detail oriented

Oral communication skills

Ability to write testing programs

Good hand eye coordination and good color vision

CAD drafting skills

Knowledge of production assembly

# OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Electronic Technician, Lead Technician, and Department Supervisor/Manager.

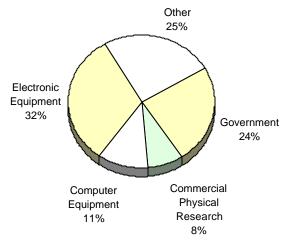
Nontraditional Occupation: Yes.

6% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

**Unionization:** None reported

### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	93%
Dental Insurance:	80%
Vision Insurance:	80%
Life Insurance:	80%
Paid Sick Leave:	80%
Paid Vacation:	80%
Retirement Plan:	80%
Child Care:	20%

Other: 401-K Plan, Tuition Reimbursement

### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, public school or program referrals, private employment agencies, Employment Development Department, job fairs, and San Diego Career Center Network.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		Х
A Little Difficult	Х	
Not Difficult		

Job Market for: Electrical and Electronic Engineering Technicians

Experienced applicants: Competitive

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Most Electrical and Electronic Engineering Technicians work full-time, 40 hours per week. A few work on a temporary or on call basis, 41 hours per week or on a seasonal basis, 25 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.50 - 14.00	\$12.00
New Hires, With Experience:	\$12.25 - 17.00	\$14.38
After Three Years With the Firm:	\$16.00 - 22.00	\$18.70

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 970

Separations to 2004: 1,190

\*Total Openings: 2,160

**New Job Growth Rate:** 16.0%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
9 project employment to grow and 6 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 211

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **ELECTRICAL AND ELECTRONIC ENGINEERS**

OES 221260

Electrical and Electronic Engineers design, develop, test and supervise the manufacture and installation of electrical and electronic equipment, components or systems, computers and related equipment and systems for commercial, industrial, military or scientific use. This category does not include Sales Engineers.

<u>Alternate Job Titles:</u> Systems Engineers, Design / Hardware Engineers, Component Test Engineers, Automation Engineers, Product Engineers, Process Engineers

**Related DOT Codes:** 003.061-010, 003.061-014, 003.061-018, 003.061-030, 003.061-034, 003.061-038

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree. Those employers responding preferred those with a degree in electrical or electronic engineering.

<u>Training:</u> Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet, database and Internet software skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 2 - 5 years experience as an Electrical or Electronic Engineer, Design Engineer or Associate Engineer.

# **Skills rated "very important":**

Understanding of electrical systems design

Embedded systems digital and analog circuitry design skills

CAD drafting skills

Ability to design and test electrical components

Analytical skills

Detail oriented

Ability to work independently

Ability to work as part of a team

Ability to perform advanced mathematical computations

Oral communication skills

Ability to write technical material

Troubleshooting skills

Ability to estimate time and cost of engineering projects

Software programming skills

Hardware design skills

Ability to read schematics and blueprints

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Project Supervisor/Manager, Senior Engineer, and Design Manager.

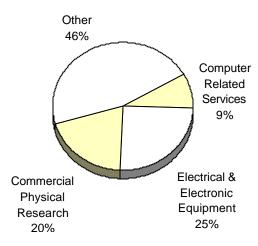
Nontraditional Occupation: Yes.

5% of workers in survey responses were female.

**Turnover:** Moderately low, 7% in the past 12 months.

**Unionization:** None reported

# WHERE THE JOBS ARE



	<u>Full-Tim</u>
Medical Insurance:	93%
Dental Insurance:	87%
Vision Insurance:	73%
Life Insurance:	87%
Paid Sick Leave:	80%
Paid Vacation:	87%
Retirement Plan:	73%
Child Care:	13%
Other: 401-K Plan. Profit Sh	naring.

Tuition Reimbursement, Short and Long Term Disability

#### **Most Frequently Used Recruitment Methods:**

Employee referrals, private employment agency, newspaper advertisements, unsolicited applicants, in-house promotion or transfer, public school or program referrals, Internet, and San Diego Career Center Network.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	Х
A Little Difficult		
Not Difficult		

Job Market for: Electrical and Electronic Engineers
Experienced applicants: Somewhat competitive
Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Electrical and Electronic Engineers work full-time, 41 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$15.00 - 21.00	\$17.35
New Hires, With Experience:	\$18.25 - 24.00	\$21.58
After Three Years With the Firm:	\$21.50 - 38.25	\$24.93

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above

OES Growth Projections: New jobs through 2004: 1,740

Separations to 2004: 1,310

\*Total Openings: 2,860

**New Job Growth Rate:** 26.0%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
9 project employment to grow, 5 expect employment to remain stable and 1 expects employment to decline over the next three years.

Education / Training Providers: See Appendix A, page 211

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **ELECTRICAL and ELECTRONIC ASSEMBLERS**

# **OES 939050**

Electrical and Electronic Assemblers include assemblers who perform work at a level not requiring a high degree of precision. The occupation includes such occupations a Electronic Wirers, Armature Connectors, Electric Motor Winders, Skein Winders, Carbon Brush Assemblers, Battery and Battery Parts Assemblers, Electric Sign Assemblers and Electronic Subassemblers.

Alternate Job Titles: Electronics Solderer, Electronics Board Assemblers, Circuit Board Assembler

**Related DOT Codes:** 721.484-010, 726.261-010, 726.684-014, 726.684-018, 729.384-026, 729.684-022

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have a high school diploma or equivalent. A few have an associate degree or some college (but not necessarily a degree).

**Training:** Some firms usually allow training to substitute for work related experience. Employers prefer applicants with 3 - 12 months training in soldering, electronics assembly or reading schematics.

**Experience:** Many firms usually require related work experience. They prefer to hire applicants with 6 - 18 months experience as a solderer or electronics assembler.

# **Skills rated "very important":**

Ability to read and follow instructions

Ability to do precision work

Manual dexterity

Soldering skills

Ability to use hand tools

Ability to do repetitive work

Good eyesight and color vision

Knowledge of electrical specifications

Ability to work on a team

Oral communication skills

Ability to use measuring instruments

Ability to use testing equipment

Ability to concentrate for long periods of time

Ability to work with a microscope

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Assembler, Supervisor, Quality Control Technician.

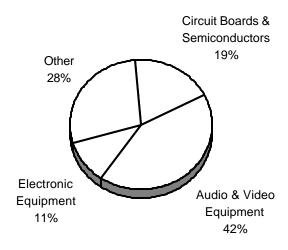
Nontraditional Occupation: No.

55% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	93%
Dental Insurance:	71%
Vision Insurance:	43%
Life Insurance:	57%
Paid Sick Leave:	71%
Paid Vacation:	79%
Retirement Plan:	50%

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Employee referral, employment agency, in-house promotion or transfer, newspaper advertisements, unsolicited applicants.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Electrical and Electronic Assemblers

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Electrical and Electronic Assemblers work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.50 - 8.00	\$6.25
New Hires, With Experience:	\$6.00 - 12.50	\$8.50
After Three Years With the Firm:	\$7.50 - 18.00	\$10.25

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

 Size of 1999 Employment:
 Large - Range 3,324 - 7,202

 OES Growth Projections:
 New jobs through 2004: 1,240

 Separations to 2004:
 790

 \*Total Openings: 2,030

**New Job Growth Rate:** 25.7%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 211

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **ELECTRIC HOME APPLIANCE AND POWER TOOL REPAIRERS**

### **OES 857110**

Electric Home Appliance and Power Tool Repairers repair, adjust and install all types of electric household appliances, such as refrigerators, washing machines, dishwashers, vacuum cleaners, room air conditioners, and small appliances, including toasters, mixers and food processors. This includes repairers of electrical hand and bench tools, such as lathes, drills, saws, grinders and polishers.

Alternate Job Titles: Appliance Repair Technicians, Sewing Machine Technicians

**Related DOT Codes:** 723.381-010, 723.584-010, 827.261-010

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (93%) require a high school diploma or equivalent. A few (7%) require less than a high school education.

**Training:** Few firms (7%) allow training to substitute for work experience. Some firms (20%) require technical training and a few (20%) employers provide appretiseship programs lasting one to four years.

**Experience:** Most firms (60%) require up to 3 years related work experience. All firms (100%) do not accept other occupational experience.

## **Skills rated "very important":**

Ability to read and follow instructions

Ability to follow safety precautions

Ability to use small hand tools

Familiarity with home appliances: (Washer, dryer, refrigerator, vacuum, microwave oven, sewing machine)

Troubleshooting skills

Ability to work independently

Ability to do cost estimates, prepare bills and collect payment

Oral communication skills

Ability to read and interpret service manuals and schematics

Ability to provide own tools

Ability to use small power tools

Possession of a reliable vehicle and drivers license

Physical strength

Mechanical and electrical aptitude

Honesty and ethics

#### OCCUPATIONAL CHARACTERISTICS

**Career Ladders:** Promote to: Shop Supervisor

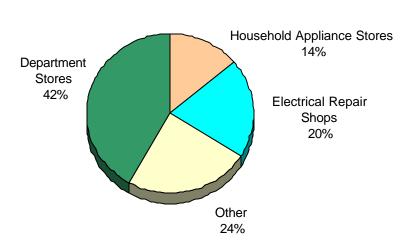
Nontraditional Occupation: Yes.

3% of workers in survey responses were female.

**Turnover:** Moderately low, 9% in the past 12 months.

**Unionization:** None reported.

#### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	27%	20%	47%
Dental Insurance:	13%	13%	67%
Vision Insurance:	13%	13%	67%
Life Insurance:	7%	7%	80%
Paid Sick Leave:	53%	0%	40%
Paid Vacation:	60%	0%	33%
Retirement Plan:	13%	0%	80%
Child Care	0%	0%	93%

Other employer specified: Company Provided Uniforms, Paid Holidays

#### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, walk-in applicants.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Electric Home Appliance Repairers

Experienced applicants: Little competition in job search
Inexperienced applicants: Little competition in job search

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (92%) Electric Home Appliance and Power Tool Repairers work full-time, 40 hours per week. A few (8%) work part-time, 18 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience: With Commissions:	\$7.50 - 12.00 \$7.50 - 12.00	\$10.00 \$12.00
New Hires, With Experience: With Commissions:	\$5.75 - 14.00 \$9.00 - 18.00	\$11.00 \$12.50
After Three Years With the Firm: With Commissions:	\$5.75 - 16.00 \$11.00 - 25.00	\$14.00 \$17.50

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - less than 1,662

**OES Growth Projections:** New jobs through 2004: 30

Separations to 2004: 30 \*Total Openings: 60

**New Job Growth Rate:** 21.4%\*. Projected growth is faster than

the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

#### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.

13 project employment to remain stable and 2 expect employment to grow over the next two years.

**Education / Training Providers:** No formal education or training program for this occupation.

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **EMPLOYMENT INTERVIEWERS - Private or Public Employment Service** OES 215080

Employment Interviewers interview job applicants in an employment office and refer them to prospective employers for consideration. They record and evaluate various pertinent data, search application files, notify selected applicants of job openings, refer qualified applicants to prospective employers and contact employers to verify referral results and record data.

Alternate Job Titles: Staffing Specialist / Coordinator, Placement Specialist, Technical Recruiter, Case Manager

**Related DOT Codes:** 166.267-010, 205.362-014

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have some college (but not necessarily a degree). Some have a bachelor degree and a few have an associate degree.

**Training:** Most firms allow training to substitute for work experience. Employers prefer applicants with word processing, database and spreadsheet software skills. Some employers provide in-house training.

**Experience:** Many firms usually require related work experience.

They prefer applicants with 1 - 2 years experience as recruiters, human resources specialists or customer service representatives.

## Skills rated "very important":

Oral communication skills

Public contact skills

Ability to work under pressure

Interviewing skills

Ability to exercise tact in dealing with others

Customer service skills

Ability to evaluate employment skills

Ability to solve problems

Computer and Internet skills

Ability to write effectively

Record keeping skills

Training to service the disabled

Patience

Cultural diversity training

Organizational skills

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Supervisor, Sales Manager, Office / Branch Manager

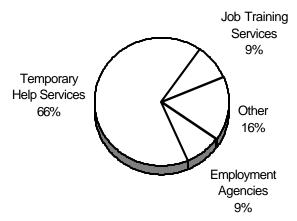
**Nontraditional Occupation:** No.

62% of workers in survey responses were female.

**Turnover:** High, 47% in the past 12 months.

**Unionization:** No.

## WHERE THE JOBS ARE



	<u>Full-Time</u>	Part-Time
Medical Insurance:	100%	7%
Dental Insurance:	93%	7%
Vision Insurance:	60%	0%
Life Insurance:	87%	7%
Paid Sick Leave:	93%	7%
Paid Vacation:	100%	7%
Retirement Plan:	67%	7%
Child Care:	13%	7%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, newspaper advertisements, employee referral, unsolicited applicants, public school or program referrals, Employment Development Department.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: **Employment Interviewers** *Experienced* applicants: **Somewhat competitive** *Inexperienced* applicants: **Somewhat competitive** 

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Employment Interviewers work full-time, 43 hours per week. Some work part-time, 25 hours per week.

<b>Hourly Wages</b>	Range	Median
New Hires, No Experience:	\$6.50 - 12.50	\$9.50
New Hires, With Experience:	\$8.00 - 14.50	\$11.00
After Three Years With the Firm:	\$10.00 - 16.75	\$12.75

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 150

Separations to 2004: 140
\*Total Openings: 290

**New Job Growth Rate:** 23.1%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

**<u>Education / Training:</u>** No formal education / training program for this occupation.

#### **Kev Terms:**

# FINANCIAL PLANNERS

## 430142999

Financial Planners develop and implement financial and/or estate plans for individuals and organizations utilizing knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. They interview clients to determine their financial resources and goals. After analysis of data, they prepare financial and/or estate plans and discuss options with clients. They may also buy and sell securities and other financial products for clients.

Alternate Job Titles: Investment Representative, Financial Advisor, Certified Financial Planner (CFP), Financial Consultant, Personal Financial Analyst

Related DOT Codes: 250.257-014

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have some college (but not necessarily a degree).

**Training:** Many firms usually allow training to substitute for work experience. Employers prefer applicants with an NASD License, Life Insurance License or Certified Financial Planner designation and have word processing, spreadsheet database and Internet software skills. Those employed as agents of a securities broker-dealer must pass the Uniform Securities Agent Law Exam, Series 63, administered by the National Association of Securities Dealers, Inc.

**Experience:** Many firms usually require related work experience. They prefer applicants with 2 - 3 years experience in insurance, securities or financial products sales and/or services.

## **Skills rated "very important":**

Interpersonal and customer service skills

Ability to counsel clients as to financial options

Oral communication skills

Ability to assist clients in financial planning / budgeting

Knowledge of securities, insurance, retirement pension and estate plans

Ability to read financial statements

Ability to interview and analyze client financial status

Knowledge of tax and investment strategies

Understanding of regulations affecting financial institutions

Ability to obtain a securities and / or insurance license

Ability and willingness to build a client base

Willingness to work long hours

Telephone answering skills, good listener

Knowledge of financial planning software

Ability to apply securities sales techniques

Ability to use the internet and on-line databases

Record keeping skills and confidentiality of records

Self motivated, honest, ethical, high integrity

## OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Sales / Branch Manager, Associate Manager, Regional Sales Manager, and Senior Associate.

### Nontraditional Occupation: Yes.

19% of workers in survey responses were female.

**Turnover:** Moderate, 13% in the past 12 months.

**Unionization:** None reported

## WHERE THE JOBS ARE

Industry -

Banks and Saving Institutions
Benefits & Financial Planning Consulting Firms
Insurance Agents and Brokers
Investment Research Firms
Money Management Firms
Securities and Brokerage Firms

	Full-Time
Medical Insurance:	100%
Dental Insurance:	82%
Vision Insurance:	82%
Life Insurance:	82%
Paid Sick Leave:	82%
Paid Vacation:	82%
Retirement Plan:	73%
Child Care:	9%
Other: 401- K plan, Profi	it Sharing

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, unsolicited applicants, and in-house promotion or transfer.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	X
A Little Difficult		
Not Difficult		

Job Market for: Financial Planners

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many Financial Planners work full-time, 46 hours per week. Many others work part-time, 19 hours per week.

Hourly Wages	Range *	Median*
New Hires, No Experience:	\$7.25 - 23.50	\$12.79
New Hires, With Experience:	\$12.00 - 34.25	\$21.31
After Three Years With the Firm:	\$21.25 - 43.25	\$28.77

<sup>\*</sup>Combined wages and commissions

## OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

**New Job Growth Rate:** Not available

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile. 10 project employment to grow and 5 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 211

#### **Key Terms:**

## FIRST LINE SUPERVISORS and MANAGERS/SUPERVISORS - PRODUCTION & OPERATING WORKERS OES 810080

First Line Supervisors and Managers/Supervisors of Production and Operating Workers directly supervise and coordinate activities of production and operating workers, such as testers, precision workers, machine setters and operators, assemblers, fabricators or plant and system operators. Managers/ Supervisors are generally found in smaller establishments where they perform both supervisory and management functions such as accounting, marketing and personnel work. In addition they may also engage, in part, in the same production work as the workers they supervise. Does not include work leaders who spend 20% or more of their time at tasks similar to those of employees under their supervision.

Alternate Job Titles: Team Coaches, Group Leaders, Pre-press Production Supervisors

**Related DOT Codes:** 539.137-014, 699.130-010, 726.130-010, 806.131-042, 979.131-010

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have a bachelor degree. Few have either some college (but not necessarily a degree) or an associate degree.

**Training:** Almost all firms never allow training to substitute for work experience. Employers usually train and promote from within the company after on-the-job training. Employers prefer applicants with word processing, spreadsheet, database, desktop publishing software skills.

**Experience:** Many firms always require related work experience. They prefer to hire applicants with 2 - 5 years experience as a manufacturing supervisor or manager.

# Skills rated "very important":

Ability to read and follow instructions

Oral communication skills

Interpersonal skills

Ability to motivate employees

Organizational skills

Ability to plan and direct production activities

Ability to handle a variety of tasks

Knowledge of production methods and procedures

Ability to hire and train staff

Business math skills

Ability to establish quality control standards

Ability to coordinate activities with other departments

Ability to solve employee grievances

Ability to write reports

Knowledge of inventory control techniques

Ability to meet deadlines

Statistical analysis

### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Plant Supervisor,

Plant Manager.

Nontraditional Occupation: No.

32% of workers in survey responses were female.

**Turnover:** Moderately low, 8% in the past 12 months.

Unionization: No.

### WHERE THE JOBS ARE

Aircraft Parts and Equipment
Clothing and Apparel Production

Electronic Component Production

**Electronic Equipment Manufacturing** 

Industrial Equipment Manufacturing

Medical Instrument Manufacturing

Publications and Commercial Printing

Radio & Television Equipment

Ship Building and Repair

Sporting and Athletic Goods

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	81%
Life Insurance:	81%
Paid Sick Leave:	94%
Paid Vacation:	100%
Retirement Plan:	69%

Other: 401-K Plan, Profit Sharing, Stock Options,

**Educational Reimbursement** 

\*The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, newspaper advertisements, web site and internet.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Production Supervisor / Manager** 

Experienced applicants: Competitive

Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All Production Supervisor / Managers work full-time, 43 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.50 - 20.25	\$14.00
New Hires, With Experience:	\$9.00 - 26.25	\$15.25
After Three Years With the Firm:	\$11.00 - 32.25	\$17.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 490

Separations to 2004: 630

\*Total Openings: 1,120

**New Job Growth Rate:** 13.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment</u>: Many responding employers project employment to grow over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

**Education / Training:** No formal education or training program for this occupation.

#### **Key Terms:**

# FOOD SERVICE MANAGERS

# **OES 150261**

Food Service Managers plan organize, direct, control, or coordinate activities of an organization or department that serves food and/or beverages. This includes Food and Beverage Directors.

<u>Alternate Job Titles:</u> Food Service Director, Food and Beverage Manager, Distribution Manager, Food Service Supervisor, Restaurant Supervisor/Manager

Related DOT Codes: 185.137-010, 187.167-026, 187.167-106, 187.167-206, 319.137-018

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have a high school diploma or equivalent and some have a bachelor degree.

**Training:** Many firms never allow training to substitute for work experience. Most employers require applicants to possess a food handlers card and have spreadsheet, word processing, and database computer software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 2 - 3 years experience as a Food Services Manager or Restaurant Manager.

# **Skills rated "very important":**

Public contact and customer service skills

Ability to work independently

Ability to read and follow instructions

Ability to work under pressure

Oral communication skills

Ability to motivate employees

Ability to manage an activity or department

Time management skills

Ability to be a team leader

Well aroomed

Willingness to work nights, weekends and holidays

Ability to hire and train personnel

Record keeping skills

Understanding of inventory techniques and purchasing procedures

Computer skills

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Restaurant Manager, and General Manager.

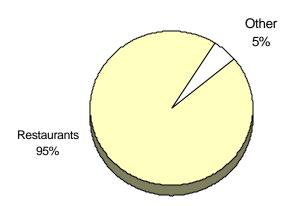
## Nontraditional Occupation: No.

46% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

**Unionization:** None reported

## WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	94%
Dental Insurance:	94%
Vision Insurance:	69%
Life Insurance:	75%
Paid Sick Leave:	75%
Paid Vacation:	81%
Retirement Plan:	56%
Other: 401-K Plan,	Performance Bonus

\*The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, public school or program referral, and trade shows.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: **Food Service Managers** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Food Service Managers work full-time, 46 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.75 - 13.75	\$10.23
New Hires, With Experience:	\$9.50 - 14.75	\$11.99
After Three Years With the Firm:	\$11.50 - 17.25	\$14.58

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 1,250

Separations to 2004: 740

\*Total Openings: 1,990

**New Job Growth Rate:** 27.8%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.
13 expect employment to remain stable, 3 project employment to grow and 1 expects employment to decline over the next three years.

**Education / Training Providers:** See Appendix A, page 212

#### **Key Terms:**

## **GENERAL OFFICE CLERKS**

**OES 553470** 

General Office Clerks perform a wide variety of tasks. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of bookkeeping, typing, stenography, office machine operation and filing. Does not include workers whose duties are narrowly defined.

Alternate Job Titles: Office Clerks, Office Assistants

**Related DOT Codes:** 209.562-010, 219.362-010, 245.362-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have a high school diploma or equivalent, or some college (but not necessarily a degree).

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 year of training for a typing certificate and operation of office equipment. Employers prefer applicants with word processing, database and spreadsheet software skills.

**Experience:** Some firms sometimes require related work experience. They prefer to hire applicants with one year experience as a receptionist or clerical assistant.

# Skills rated "very important":

Ability to read and follow instructions

Oral communication skills

Ability to operate office machines

English, grammar, spelling, punctuation skills

Problem solving skills

Alphabetic and numerical filing skills

Ability to work under pressure

Telephone answering skills

Public contact skills

Ability to do basic math

Computer and typing skills

Customer service skills

Ability to keep accurate notes and records

Ability to meet deadlines

Ability to work well with others

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Administrative Secretary, Senior Office Clerk / Specialist

**Nontraditional Occupation:** No.

87% of workers in survey responses were female.

**Turnover:** High, 31% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 19% of employees surveyed.

### WHERE THE JOBS ARE

**Business Services** 

Civic and Social Organizations

Government Agencies

Hospitals & Medical Offices

Legal Services

Retail Stores

Schools and Colleges

	<u>Full-Time</u>
Medical Insurance:	94%
Dental Insurance:	94%
Vision Insurance:	69%
Life Insurance:	81%
Paid Sick Leave:	75%
Paid Vacation:	88%
Retirement Plan:	69%
Child Care:	6%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Newspaper Advertisements, in-house promotion or transfer, employee referrals, unsolicited applicants, public school or program referrals.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: **General Office Clerks** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many General Office Clerks work full-time, 40 hours per week. Some work part-time, 25 hours per week or on a temporary or on-call basis basis, 28 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$5.25 - 10.75	\$7.25
New Hires, With Experience:	\$5.25 - 10.75	\$8.25
After Three Years With the Firm:	\$7.00 - 11.75	\$9.50

<sup>\*</sup>Includes union and non-union wages.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above

OES Growth Projections: New jobs through 2004: 3,590

Separations to 2004: 5,080

\*Total Openings: 8,670

**New Job Growth Rate:** 12.1%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 212

#### **Kev Terms:**

## **GRAPHIC ARTISTS**

### No OES Code

Graphic Artists draw or paint illustrations for use by various media to explain or adorn printed or spoken word. They study layouts or sketches of proposed illustrations and related materials to become familiar with assignment. They determine style, technique and medium best suited to produce desired effects and conform with reproduction requirements. They formulate a concept and render illustration and detail from models, sketches, memory and imagination. May discuss illustrations at various stages of completion and make changes as necessary. May select type, draw lettering and lay out material. May draw or paint graphic material and lettering to be used for title, background, screen advertising, commercial logo and other visual layouts for motion picture production and television programming.

Alternate Job Titles: Illustrator, Production Artist, Presentation Specialist

Related DOT Codes: 195.107-010, 195.367-034

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have an bachelor degree. Some have an associate degree or some college (but not necessarily a degree).

**Training:** Many firms never allow training to substitute for work experience. Employers prefer applicants with 2 years training in graphic design and in desktop publishing software skills (Adobe Illustrator, Corel Draw, PageMaker, Photoshop, Quark Express) and word processing and graphic design.

**Experience:** Many firms always require related work experience. They prefer applicants with 2 - 3 years experience as Graphic Designers, Graphic Technicians or Layout Artists.

## Skills rated "very important":

Ability to read and follow instructions

Ability to meet deadlines

Ability to work independently and on a team

Creativity

Oral communication skills

Customer service skills

Ability to use computer drawing software

Ability to do graphic design

Artistic skills: airbrushing, drawing, painting, paste up, photo editing

Good color vision

Knowledge of color separation

Photo retouching

Interactive design

Ability to do quality work

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Art Director, Design / Marketing Manager.

Nontraditional Occupation: No.

59% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

<u>Unionization:</u> Yes. 5% of employers surveyed and 8% of employees.

### WHERE THE JOBS ARE

Advertising Agencies
Cable and Television Broadcast Stations
Colleges and Universities
Commercial Art and Graphic Design Services
Commercial Printers
Manufacturing Companies
Newspaper, Book and Periodical Publishers
Web Site Design Companies

	Full-Time
Medical Insurance:	78%
Dental Insurance:	61%
Vision Insurance:	39%
Life Insurance:	56%
Paid Sick Leave:	67%
Paid Vacation:	94%
Retirement Plan:	50%
Other: 401-K Plan, Stock Op	otions

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, job hotline

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Graphic Artists

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Graphic Artists work full-time, 41 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$6.00 - 14.75	\$10.00
New Hires, With Experience:	\$8.00 - 17.25	\$11.50
After Three Years With the Firm:	\$10.00 - 22.00	\$13.00

<sup>\*</sup>Union and non-union wages included.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 520

<u>Separations to 2004:</u> \*Total Openings: 250

Openings for Graphic Artists are included in the general classification of Artists and Related Workers.

**New Job Growth Rate:** 35.1%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

**Employer Outlook on Employment :** Most responding employers project employment to grow over the next three years.

**Employer Responses:** 21 employers supplied data used in this analysis.

**Education / Training Providers :** See Appendix A, page 214

#### **Key Terms:**

### HAND PACKERS AND PACKAGERS

### **OES 989020**

Hand Packers and Packagers pack or package by hand a wide variety of products and materials. Does not include workers whose jobs require more than minimum training.

Alternate Job Titles: Packers, Shippers, Assembler Packers, Production Workers

Related DOT Codes: 529.687-022, 920.587-018, 920.687-134

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (69%) require less than a high school education. Some (31%) require a high school diploma or equivalent.

**Training:** Some firms (25%) allow training to substitute for work experience. All firms (100%) do not require technical or vocational training.

**Experience:** Most firms (75%) do not require related work experience. Responding employers report rarely hiring experienced applicants.

## **Skills rated "very important":**

Ability to perform accurate work

Ability to stand continuously for 2 or more hours

Ability to work under pressure

Ability to read and follow instructions

Oral communication skills

Good hand eye coordination

Ability to work independently

Knowledge of shipping and labeling procedures

Ability to write legibly

Ability to use cutting tools

Willingness to work with close supervision

Willingness to work nights, weekends, holidays

Ability to read manifests

Possession of a valid drivers license

Knowledge of packing and wrapping procedures / materials

Knowledge of safe working procedures

Legal U.S. citizen or holder of green card

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Shipper, Supervisor, Checker, Driver, Sales Representative, Crew Leader, Materials Handler, Manager

## Nontraditional Occupation: No.

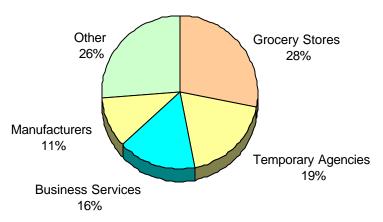
48% of workers in survey responses were female.

<u>Turnover:</u> Very low, 5% in the past 12 months. A few employers report high turnover due to the seasonal

nature of their business.

<u>Unionization:</u> Yes. 19% of employers and 5% of employees were unionized.

# WHERE THE JOBS ARE



## FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	E'ee Pays All
Medical Insurance:	21%	21%	7%
Dental Insurance:	21%	14%	7%
Vision Insurance:	7%	21%	7%
Life Insurance:	21%	14%	0%
Paid Sick Leave:	29%	0%	0%
Paid Vacation:	43%	0%	0%
Retirement Plan:	14%	0%	21%
Child Care	0%	0%	0%

Other employer specified: 401-K Plan, Paid Holidays, Profit Sharing, Education Reimbursement,

## **Three Most Frequently Used Recruitment Methods:**

Employee referrals, walk-in applicants, newspaper advertisements.

Others include: Private employment agencies, radio advertisements.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult		
Not Difficult		Х
Few Employers Hire	X	

Job Market for: Hand Packers and Packagers

Experienced applicants: Very competition job search

Inexperienced applicants: Very competitive job search

## **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Many (57%) Hand Packers and Packagers work on a temporary or on-call basis. A few (19%) work full-time or on a seasonal basis (18%), at 40 hours per week.

**Shifts:** All employers (100%) report having day shifts. Some (25%) also have swing shifts.

Hourly Wages*	Range *	Median *
New Hires, No Experience:	\$5.75 - 6.50	\$6.00
New Hires, With Experience:	\$5.75 - 8.00	\$6.50
After Three Years With the Firm:	\$6.50 - 9.50	\$7.13

<sup>\*</sup>Combined union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment:Large - Range 3,324 - 7,202OES Growth Projections:New jobs through 2004: 1,460Separations to 2004:1,230

\*Total Openings: 1,230 2,690

New Job Growth Rate: 25.1%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

## **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile. 8 project employment to grow and 8 expect employment to remain stable over the next two years.

**Education / Training Providers:** No formal education or training program for this occupation.

### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

## HAZARDOUS MATERIALS REMOVAL WORKERS

### **OES 878030**

Hazardous Materials Removal Workers remove, pack, transport and/or dispose of hazardous materials, including asbestos, waste fuel, contaminated soil, etc. Specialized training and certification in hazardous materials handling and/or a confined entry permit is generally required.

Alternate Job Titles: Waste Technicians, Hazardous Materials Handlers, Environmental Service Workers, Environmental Field Technicians, Chemical Logistics Operators, Shop Workers, Asbestos Abatement Workers, Hazardous Waste Technicians, Environmental Safety Technicians, Environmental Health Specialists, Hazardous Waste Handlers/Disposers

**Related DOT Codes:** 029.261-014, 168.267-086, 869.684-082, 955.383-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (93%) require a high school diploma or equivalent. A few (7%) require a bachelor degree.

**Training:** Most firms (64%) allow training to substitute for work experience. Most firms (60%) require technical training. All firms provide training and all applicants are required to take the OSHA 40 hour "Hazwopper" course and must be certified by the state before starting work. Eight hour refresher courses are provided to all Hazardous Waste Handlers annually.

**Experience:** Most firms (67%) do not require prior related work experience, but prefer 6 - 36 months experience as a Hazardous Materials Removal Worker. Some firms (36%) accept applicants with 9 - 24 months experience as Hazardous Waste Technicians or Field Chemists.

# **Skills rated "very important":**

Completion of hazardous waste handlers course

Record keeping and documentation skills

Ability to read and follow instructions

Knowledge of cleanup, decontamination and disposal procedures

Ability to apply principles of hazardous and toxic waste disposal

Knowledge of containment procedures

Knowledge of public health and safety procedures

Oral communication skills

Ability to work independently

Interpersonal and customer service skills

Knowledge of spill prevention procedures

Knowledge of government rules and regulations

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Handler, Field Technician II, Foreman, Supervisor, Field Chemist, Environmental Health Supervisor, Estimator, Driver.

### Nontraditional Occupation: Yes.

7% of workers in survey responses were female.

Turnover: Moderate, 14% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 6% of employees

were unionized.

## WHERE THE JOBS ARE

### Industry

Electronic manufacturing

Environmental cleanup services

Federal government (U.S. military)

Hazardous waste handling and disposal services

Landfill operations

Local government

Local ship building and repair

Waste collection and disposal services

# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	87%	13%	0%
Dental Insurance:	53%	20%	27%
Vision Insurance:	47%	20%	33%
Life Insurance:	47%	13%	40%
Paid Sick Leave:	60%	0%	40%
Paid Vacation:	87%	0%	13%
Retirement Plan:	47%	7%	40%
Child Care	0%	0%	100%

Other employer specified: Company provided protection gear

## **Three Most Frequently Used Recruitment Methods:**

Employee referrals, walk-in applicants, newspaper advertisements.

Others include: Internet, trade journals, in-house promotion or transfer.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		Х
Not Difficult		
Few Employers Hire		

Job Market for: Hazardous Materials Removal Workers Experienced applicants: No competition in job search Inexperienced applicants: Little competition in job search

## **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (97%) Hazardous Materials Removal Workers work full-time, 42 hours per week.

**Shifts:** All employers (100%) report having day shifts. A few (7%) also have swing and graveyard shifts.

Hourly Wages <sup>*</sup>	Range <sup>*</sup>	Median*
New Hires, No Experience:	\$7.50 - 14.61	\$10.00
New Hires, With Experience:	\$10.00 - 15.00	\$12.00
After Three Years With the Firm:	\$12.00 - 18.00	\$14.76

<sup>\*</sup>Combined union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Small - Less than 1,662 **OES Growth Projections:** New jobs through 2004: 90

Separations to 2004: 0 \*Total Openings: 90

New Job Growth Rate: 25.0%\*. Projected growth is faster than

the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.

12 project employment to remain stable and 3 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 214

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

## HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS AND INSTALLERS OES 859020

Heating, Air Conditioning, and Refrigeration Mechanics and Installers install and repair heating, air conditioning, and refrigeration systems. Their duties may include installation and repair of oil burners, hot-air furnaces, heating stoves, and similar equipment in homes and commercial establishments using hand and pipe threading tools. They may also install and repair cooling and central air conditioning systems. Does not include workers who do only plumbing and pipefitting work.

Alternate Job Titles: Heating and Air Conditioning Technicians/Mechanics, Service Technicians/Installers, Journey Level Technicians

**Related DOT Codes:** 637.261-014, 637.361-010, 637.381-014, 637.664-010, 827.261-026

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (94%) require a high school diploma or equivalent.

**Training:** Many firms (53%) allow technical training to substitute for work experience. Employers prefer applicants with 12 - 24 months HVAC training. Most firms (65%) require technical or vocational training. Some firms provide 3 -12 months on-the-job training and a few provide 4 year apprenticeship programs.

**Experience:** Many firms (59%) require 2 - 5 years related work experience. Many firms (41%) prefer but do not require related work experience. Some firms (31%) accept related occupational experience as a plumber, electrician, or air conditioning trade worker.

## Skills rated "very important":

Possession of mechanical aptitude

Knowledge of heating, air conditioning and refrigeration systems

Possession of a valid drivers license

Ability to work independently

Troubleshooting skills

Ability to work on a team

Knowledge of safe working practices and safety gear

Ability to read and follow instructions

Ability to work under pressure and meet deadlines

Ability to use hand tools and power tools

Oral communication skills

Ability to work from ladders or scaffolds

Ability to lift 50 lbs.

Ability to read and interpret blueprints

Knowledge of shop mathematics

Ability to stand continuously for 2 or more hours

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Technician/Installer, Foreman, Supervising Technician, Sales/Service Manager.

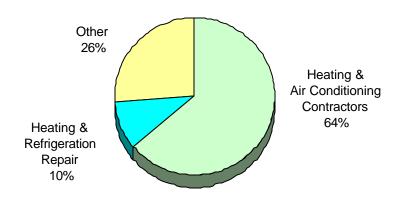
Nontraditional Occupation: Yes.

3% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

<u>Unionization:</u> Yes. 12% of employers and 11% of employees were unionized.

## WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

## **Full Time Employees**

	E'er Pays All	Shared Cost	Not provided
Medical Insurance:	76%	18%	6%
Dental Insurance:	47%	12%	41%
Vision Insurance:	24%	6%	71%
Life Insurance:	41%	0%	53%
Paid Sick Leave:	47%	6%	47%
Paid Vacation:	82%	6%	6%
Retirement Plan:	24%	6%	53%
Child Care	0%	0%	100%

Other employer specified: 401-K Plan, Long Term Disability

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, walk-in applicants.

**Others include:** Internet, school or program referrals, private employment agencies.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		Х
Not Difficult		
Few Employers Hire		

Job Market for: Heating, Air Conditioning, and Refrigeration Mechanics Experienced applicants: No competition in job search Inexperienced applicants: Little competition in job search

## **HOURS, SHIFTS AND WAGES**

**Average Weekly Hours:** Almost all (98%) Heating, Air Conditioning, and Refrigeration Mechanics work full-time, 41 hours per week.

Shifts: All employers (100%) report having day shifts.

Hourly Wages*	Range *	Median*
New Hires, No Experience:	\$8.00 - 9.59	\$8.25
New Hires, With Experience:	\$10.00 - 17.98	\$13.00
After Three Years With the Firm:	\$14.00 - 20.00	\$18.00

<sup>\*</sup>Combined union and non-union wages, some employers may also pay a bonus.

## OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 310

Separations to 2004: 200 \*Total Openings: 510

New Job Growth Rate: 29.8%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

## **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.12 project employment to grow and 5 expect employment to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 214

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

## **HOTEL DESK CLERKS**

## **OES 538080**

Hotel Desk Clerks accommodate hotel patrons by registering and assigning rooms to guests, issuing room keys, transmitting and receiving messages, keeping records of rooms occupied and guests' accounts, making and confirming reservations and presenting statements to and collecting payments from departing guests.

<u>Alternate Job Titles:</u> Front Desk Agents/Clerks, Guest Service Agents/Representatives, Guest Relations Agents

Related DOT Codes: 238.367-038

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All (100%) firms require have a high school diploma or equivalent.

**Training:** Some firms (37%) allow 6 - 12 months training to substitute for work experience. Almost all firms (87%) do not require technical or vocational training. Employers prefer applicants with industry database and word processing computer software skills.

**Experience:** Most firms (78%) do not require but prefer related work experience. Most firms (68%) accept other occupational experience such as 6 - 12 months of customer service experience. Responding employers report rarely hiring experienced applicants.

# **Skills rated "very important":**

Customer service skills

Oral communication skills

Dedication to being well groomed/professional appearance

Ability to work on a team

Willingness to work nights, weekends and holidays

Ability to work under pressure

Ability to stand continuously for 2 or more hours

Ability to read and follow instructions

Cash handling skills

Ability to work independently

Basic math skills

Familiar with local tourist attractions and restaurants

Record keeping skills

Willingness to work with close supervision

Interpersonal skills

Ability to speak a second language

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Front Desk Supervisor, Guest Services Manager, Front Office Manager, Sales Representative, Concierge, Shift Leader, Catering Manager, Night Auditor, Accounting Manager, Human Resource Assistant.

### **Nontraditional Occupation:** No.

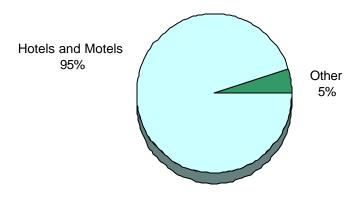
63% of workers in survey responses were female.

**Turnover:** High, 41% in the past 12 months.

**Unionization:** Yes. 13% of employers and 12% of employees

were unionized.

## WHERE THE JOBS ARE



## FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	26%	65%	9%
Dental Insurance:	26%	43%	13%
Vision Insurance:	26%	26%	43%
Life Insurance:	43%	26%	22%
Paid Sick Leave:	48%	17%	35%
Paid Vacation:	74%	17%	9%
Retirement Plan:	22%	52%	26%
Child Care	0%	0%	100%

Other employer specified: 401-K Plan, Benefit Room Nights, Daily Meal Allowance, Stock Options

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer.

Others include: Walk-in applicants, colleges and universities, job postings.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult		
Not Difficult		Х
Few Employers Hire	Х	

Job Market for: Hotel Desk Clerks

Experienced applicants: Very competitive job search Inexperienced applicants: Very competitive job search

## **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (89%) Hotel Desk Clerks work full-time, 39 hours per week. A few (10%) work part-time, 21 hours per week.

**Shifts:** All employers (100%) report having day shifts. Almost all (83%) also have swing shifts and many (48%) have a graveyard shift.

Hourly Wages	Range	Median
New Hires, No Experience:	\$7.00 - 8.00	\$7.50
New Hires, With Experience:	\$7.00 - 8.72	\$7.75
After Three Years With the Firm:	\$8.00 - 10.00	\$9.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 330

Separations to 2004: 660

\*Total Openings: 990

**New Job Growth Rate:** 19.0%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

### **Employer Responses and Employment Outlook:**

23 employers provided data to develop this profile.

21 project employment to remain stable and 2 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 215

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

<sup>\*7</sup> Year period 1997 through 2004.

## **HUMAN RESOURCE TECHNICIANS**

## 166267999

Human Resource Technicians provide assistance to personnel directors and managers in identifying, evaluating and resolving human relations and work performance problems within establishments. Workers in this occupation attend meetings of managers, supervisors and work units to ascertain problems that adversely affect employee morale and productivity and to determine effective remediation techniques, such as job skill training or personal intervention; develop and conduct training to instruct managers, supervisors, and workers in a variety of related skills such as supervisory skills, conflict resolution skills, interpersonal communication skills and group interaction skills; schedule individuals for technical job-related skills training. They may assist in screening applicants for employment and in-house training programs, participate in labor relations issues; and write employee newsletter.

Alternate Job Titles: Human Resource Representative, Human Resource Coordinator, Human Resource Assistant

Related DOT Codes: 166.267-038, 205.367-062, 209.362-026

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Many recent hires have an associate degree. Some have a bachelor degree and a few have some college (but not necessarily a degree).

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with human resource training and certification, have a knowledge of employment law, and possess word processing, spreadsheet, database and Internet software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 1 - 3 years experience as a Human Resource Assistant, Technician or Representative, Customer Service Representative or Accounting Assistant.

# **Skills rated "very important":**

Ability to keep personnel records confidential

Oral communication and telephone answering skills

Customer service and interpersonal skills

Knowledge of company employment policies

Knowledge of labor and employment laws

Record keeping and filing skills

Report writing and proof reading skills

Ability to interview job applicants for information

Knowledge of company compensation and benefits packages

Knowledge of job classification systems

Knowledge of various cultural backgrounds

Willingness to work long hours

Problem solving skills

Knowledge and use of human resource data bases

Knowledge of Internet recruiting

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Human Resource Coordinator, Human Resource Director, Human Resource Administrator/Manager, and Training Director.

Nontraditional Occupation: No.

94% of workers in survey responses were female.

**Turnover:** Moderately high, 23% in the past 12 months.

**Unionization:** None reported

### WHERE THE JOBS ARE

Jobs can be found in all industries both public and private such as:

Education Finance Government Hospitality Manufacturing

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	56%
Life Insurance:	83%
Paid Sick Leave:	89%
Paid Vacation:	94%
Retirement Plan:	83%
Child Care:	11%

Other: Tuition Reimbursement, Stock Options,

**Profit Sharing** 

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, Internet, and San Diego Career Center Network.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult		
Not Difficult	Х	Х

Job Market for: **Human Resource Technicians** 

Experienced applicants: Competitive Inexperienced applicants: Competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Human Resource Technicians work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$7.25 - 14.50	\$10.00
New Hires, With Experience:	\$8.50 - 17.25	\$12.00
After Three Years With the Firm:	\$10.00 - 21.50	\$15.17

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.
10 expect employment to remain stable and 8 project employment to grow over the next three years.

**Education / Training Providers:** See Appendix A, page 215

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## IMPORT / EXPORT SPECIALISTS

# **No OES Code - Emerging Occupation**

Import / Export Specialists examine and/or prepare documents such as invoices, bills of lading and shipping statements to verify conversion of merchandise weights or volumes into foreign equivalents. May compute duties, tariffs, weight, shipping storage and demurrage charges, volume and price conversions of merchandise to be exported or imported. May convert foreign currency figures into United States monetary equivalents or domestic currency into foreign equivalents using rate charts. May examine shipping manifest and bills of lading to determine procedures for release or acceptance of cargo. May also contact shippers (air, ground, or sea) to determine when cargo will be available for transit.

Alternate Job Titles: Customs Broker, Foreign Clerk, Customer Service Representative, International Sales Assistant / Manager

Related DOT Codes: 184.117-022, 186.117-018, 214.362-010, 214.137-010, 214.467-010

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Some recent hires have a high school diploma or equivalent or some college (but not necessarily a degree).

<u>Training:</u> Most firms never allow training to substitute for work experience. Employers prefer applicants who have completed a college internship and have word processing, spreadsheet or database software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 - 2 years experience as an International Salesperson, Exporter or Customs Service Representative.

# **Skills rated "very important":**

Ability to read and follow instructions
Oral communication skills
Record keeping skills
Ability to work independently
Ability to work under pressure
Knowledge of tariff and customs regulations
Ability to read and understand legal documents
Ability to use a computer
Familiar with shipping invoices and manifests
Negotiation skills

Bilingual ability
Knowledge of international trade
Sales and marketing skills
Organizational skills
Customer service skills
Knowledge of the internet

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Department Supervisor Sales / Marketing Manager.

**Nontraditional Occupation:** No.

55% of workers in survey responses were female.

**Turnover:** Moderately high, 21% in the past 12 months.

Unionization: No.

### WHERE THE JOBS ARE

Commercial Freight Forwarders Customs Brokers Import / Export Brokers Manufacturing Companies

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	86%
Vision Insurance:	36%
Life Insurance:	64%
Paid Sick Leave:	86%
Paid Vacation:	93%
Retirement Plan:	57%

Other: 401-K Plan

## **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, employee referral, newspaper advertisements, trade journals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Import / Export Specialist Experienced applicants: Competitive Inexperienced applicants: Competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers indicate Import / Export Specialists work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$7.25 - 12.50	\$10.00
New Hires, With Experience:	\$8.00 - 13.50	\$11.50
After Three Years With the Firm:	\$10.00 - 15.00	\$14.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

<u>Employer Outlook on Employment</u>: Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis

Education / Training Providers: See Appendix A, page 215

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

## **INSPECTORS, TESTERS AND GRADERS - PRECISION**

### 830020999

Inspectors, Testers and Graders - Precision perform precision inspecting, testing and grading of parts, products and equipment for defects, wear and deviations from specifications. Most of these workers use precision measuring instruments and complex test equipment and hand tools and make minor repairs. Does not include workers who combine inspection and testing with major repair work.

The following is used by employers in the bio-technology industry when describing inspectors, testers and graders and is a subset of the above definition.

# MANUFACTURING ASSISTANTS (BIO-TECHNOLOGY)

Manufacturing Assistants (Bio-Technology) assist in the accurate manufacturing and packaging of potential and existing products; keeps production records. They weigh, measure and check raw materials and ensure the manufactured batches contain the proper ingredients and quantities. They work with automated or semi-automated equipment. They keep equipment and area clean and comply with good manufacturing practices (GMPs) and safety regulations. They notify supervisor of any process discrepancies. They trouble shoot equipment and report all malfunctions to supervisor as soon as possible.

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Many recent hires have a high school diploma or equivalent and some have taken college courses (but not necessarily obtained a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Some employers provide in-house training in Good Manufacturing Practices (GMP) and prefer applicants with word processing software skills.

**Experience:** Many firms sometimes require related work experience. They prefer applicants with 6 - 12 months experience as a Production Technician, Manufacturing Assistant or Quality Control Technician.

# **Skills rated "very important":**

Ability to read and follow instructions

Ability to follow safe equipment operating practices

Ability to work on a team

Ability to monitor gauges and signals

Manual dexterity

Knowledge of OSHA safety standards

Ability to operate automated manufacturing equipment

Willingness to work with close supervision

Knowledge of automated manufacturing processes

Oral communication skills

Knowledge of proper disposal of chemical waste

Basic math skills

Ability to work independently

Ability to maintain production equipment

Ability to tolerate noise, fumes and odors

Troubleshooting skills

Knowledge of ISO 9000

## **OCCUPATIONAL CHARACTERISTICS**

Alternate Job Titles: Production Operators / Technicians, Specialists, Assistants, Manufacturing Technicians, Weighers, Packagers, Quality Control Technicians, Laboratory Technicians

**Related DOT Codes:** 012.261-014, 221.382-018,

559.361-010, 929.687-062

<u>Career Ladders:</u> Promote to: Manufacturing Associate, Production Supervisor/Manager, Lead Manufacturing Technician, and Team Leader.

## Nontraditional Occupation: No.

49% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

Unionization: None reported

### WHERE THE JOBS ARE

Jobs can be found in industries such as:

Biotechnology Research
Chemical Products Manufacturing
Pharmaceutical and Drug Manufacturing
Temporary Staffing Agencies

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	82%
Vision Insurance:	53%
Life Insurance:	71%
Paid Sick Leave:	88%
Paid Vacation:	88%
Retirement Plan:	59%
Child Care:	6%

Others: 401-K Plan, Disability Insurance, Stock Options

## **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, private employment agencies, employee referrals, and San Diego Career Center Network.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: **Manufacturing Assistants** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

### **HOURS AND WAGES**

**Average Weekly Hours:** Many Manufacturing Assistants work full-time, 40 hours per week or on a temporary or on-call basis, 39 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 15.00	\$8.00
New Hires, With Experience:	\$6.00 - 20.00	\$9.00
After Three Years With the Firm:	\$8.00 - 30.00	\$11.51

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Large - 3,324 - 7,202

**OES Growth Projections:** New jobs through 2004: 160

Separations to 2004: 120
\*Total Openings: 280

**New Job Growth Rate:** 19.3%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

## **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.
13 project employment to grow and 4 expect employment to remain stable over the next three years.

**Education / Training Providers:** See Appendix A, page 218

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

<sup>\*7</sup> year period 1997 through 2004.

# INSTRUCTIONAL AIDES

# OES 315211

Instructional Aides work under the direct supervision of classroom teachers to assist the teacher in instructional tasks, and activities involving games, sports, arts and crafts. They also do routine clerical tasks such as record keeping, maintaining classroom supplies, and operating office equipment. They may assist teachers with the instruction of mentally or physically handicapped pupils.

Alternate Job Titles: Teacher Assistants, Teacher Aides, Special Education Aides, Classroom Aides, Student Tutors

Related DOT Codes: 099.327-010, 219.467-010, 249.367-074

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have some college (but not necessarily a degree).

**Training:** Most firms never allow training to substitute for work experience, though they prefer applicants with early childhood education and training for Special Education Instructional Aides and have basic computer skills.

**Experience:** Some firms usually require related work experience. They prefer applicants with 6 - 12 months experience as a Volunteer Student Teacher, Teacher Assistant, Student Teacher, Child Instructor or Special Education Assistant.

## **Skills rated "very important":**

Willingness to work part time

Possess a clean police record

Patience with children

Ability to read and follow instructions

Oral communication skills

Ability to work under pressure and handle crises situations

Ability to perform emergency first aid

Classroom management skills

Classroom discipline skills and supervision skills

Ability to work independently

Record keeping skills

Ability to motivate students

Ability to provide classroom clerical support

Ability to write effectively

Ability to perform basic mathematical computations

## OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Instructional Lab Technician, and Classroom Teacher with requisite education.

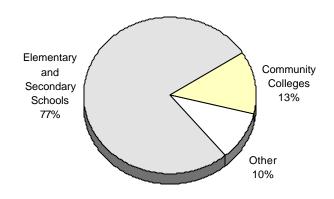
**Nontraditional Occupation:** No.

61% of workers in survey responses were female.

**Turnover:** Extremely high, 41% in the past 12 months.

<u>Unionization:</u> Yes. 19% of employers and 9% of employees were unionized.

### WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	67%	33%
Dental Insurance:	50%	33%
Vision Insurance:	33%	33%
Life Insurance:	50%	33%
Paid Sick Leave:	67%	33%
Paid Vacation:	50%	33%
Retirement Plan:	33%	50%

Other: Tuition Reimbursement

## **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, unsolicited applicants, employee referrals, in-house promotion or transfer, County Office of Education, school campus postings, and Regional Occupational Program.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult		Х
Not Difficult	Х	

Job Market for: Instructional Aides

Experienced applicants: Very competitive
Inexperienced applicants: Competitive

### **HOURS AND WAGES**

Average Weekly Hours: Almost all Instructional Aides work parttime, 21 hours per week. A few work full-time, 38 hours per week, or on a temporary or on-call basis, 30 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$5.75 - 10.75	\$7.40
New Hires, With Experience:	\$6.00 - 11.25	\$7.75
After Three Years With the Firm:	\$7.25 - 13.00	\$9.25

<sup>\*</sup>Includes union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 2,330
Separations to 2004: 750

\*Total Openings: 2,320

**New Job Growth Rate:** 32.1%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

## **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

11 expect employment to remain stable and 5 project employment to grow over the next three years.

**Education / Training Providers:** See Appendix A, page 215

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# INTERPRETERS, SIGN LANGUAGE

137267998

Sign Language Interpreters provide translation between spoken and manual (sign language) communication. Translates spoken material into sign language for understanding of deaf. Interprets sign language of deaf into oral or written language for hearing individuals or others not conversant in sign language. May translate television news and other broadcasts for deaf viewers.

Alternate Job Titles: Interpreters for the Hearing Impaired/Deaf, Translators for the Deaf

Related DOT Codes: 137.267-014

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms require either a high school diploma or equivalent (44%) or an associate degree (44%).

**Training:** Some firms (22%) allow training to substitute for work experience. Employers require certification by the National Association of the Deaf (NAD) or Registered Interpretory for the Deaf (RID).

**Experience:** Almost all firms (89%) require 1 - 2 years related work experience. Responding employers report rarely hiring inexperienced applicants.

## **Skills rated "very important":**

Ability to use and interpret American Sign Language (ASL)

Ability to Sign Exact English (SEE)

Ability to work independently

Willingness to work part-time, on-call, work nights, weekends or holidays

Ability to pay attention to detail

English grammar and spelling skills

Ability to work as part of a team

Ability to work under pressure

Verbal communication and presentation skills

Ability to perform routine repetitive work

Ability to read and follow instructions

Oral communication skills

Problem solving skills

Multi-cultural familiarity

Possession of a reliable vehicle and drivers license

Interpersonal skills

Ability to work with adolescents

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Interpreter, Supervisor, Sign Language Trainer.

## **Nontraditional Occupation:** No.

75% of workers in survey responses were female.

**Turnover:** Moderately low, 6% in the past 12 months.

<u>Unionization:</u> Yes. 11% of employers and 2% of employees were unionized.

### WHERE THE JOBS ARE

## Industry

Community Based Social Organizations Interpreting Services Selected Community Colleges Selected High School Districts Selected Colleges and Universities

## FRINGE BENEFITS, WHO PAYS\*

### **Part Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	0%	11%	56%
Dental Insurance:	0%	11%	56%
Vision Insurance:	0%	11%	56%
Life Insurance:	0%	0%	67%
Paid Sick Leave:	11%	0%	56%
Paid Vacation:	11%	0%	56%
Retirement Plan:	0%	0%	56%
Child Care	0%	0%	67%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

## **Three Most Frequently Used Recruitment Methods:**

Colleges and universities, employee referrals, walk-in applicants.

**Others include:** School and program referrals, networking with the deaf community.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		
Not Difficult		
Few Employers Hire		Х

Job Market for: Sign Language Interpreters

Experienced applicants: No competition in job search Inexperienced applicants: Very competitive in job search

## **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Many Sign Language Interpreters work on a temporary or on-call basis (51%), 15 hours per week or part-time (44%), 23 hours per week. A few (5%) work full-time, 38 hours per week.

**Shifts:** Almost all employers (89%) report having day shifts and most (78%) have evening shifts.

Hourly Wages*	Range*	Median*
New Hires, No Experience:	Not available	Not available
New Hires, With Experience:	\$12.05 - 22.00	\$18.00
After Three Years With the Firm:	\$12.05 - 26.00	\$24.00

<sup>\*</sup>Combined union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Not available **OES Growth Projections:** Not available

**New Job Growth Rate:** Not available

# **Employer Responses and Employment Outlook:**

9 employers provided data to develop this profile.7 project employment to remain stable and 2 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 216

#### **Kev Terms:**

# LANDSCAPE ARCHITECTS

### **OES 223080**

Landscape Architects plan and design land areas for such projects as parks and other recreational facilities, airports, highways, hospitals, schools, land subdivisions and commercial, industrial and other residential sites.

Alternate Job Titles: Landscape Planner, Project Landscape Architect, Project Manager

Related DOT Codes: 001.061-018

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All recent hires have a bachelor degree.

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years apprenticeship with experience on Autocad and Landcad software systems. Employers also look for word processing, spreadsheet, data base and desktop publishing software skills. Landscape Architects are required to be licensed and registered by the State Board of Landscape Architects.

**Experience:** Many firms usually require related work experience. Employers prefer applicants with 1 - 3 years experience as a Drafter, Land Planner or Landscape Designer.

## Skills rated "very important":

Ability to prepare detailed scale drawings

Ability to read and follow instructions

Oral communication skills

Ability to work under pressure and meet deadlines

Ability to work on a team

Ability to work independently

Interpersonal and customer service skills

Knowledge of plants, trees, shrubs and ground covers

Ability to use computer aided drafting systems (CAD)

Ability to prepare written reports

Basic math skills

Ability to analyze geographic and site conditions

Knowledge of drainage and irrigation systems

Knowledge of environmental regulations

Organizational skills

## **OCCUPATIONAL CHARACTERISTICS**

Career Ladders: Promote to: Senior Landscape Architect. Associate Planner or Partner.

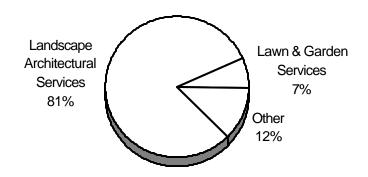
## Nontraditional Occupation: No.

33% of workers in survey responses were female.

**Turnover:** Moderate, 13% in the past 12 months.

**Unionization:** No.

## WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	0%
Vision Insurance:	0%
Life Insurance:	20%
Paid Sick Leave:	80%
Paid Vacation:	100%
Retirement Plan:	60%

Other: Profit Sharing

### **Most Frequently Used Recruitment Methods:**

Employee referrals, industry organizations, newsletters, newspaper advertisements, public school or program referrals.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Landscape Architect

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Landscape Architects work full-time, 40 hours. A few work part-time 26, hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.00 - 14.00	\$12.00
New Hires, With Experience:	\$10.00 - 17.00	\$14.00
After Three Years With the Firm:	\$14.00 - 25.00	\$18.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662
OES Growth Projections: New jobs through 2004: 40

Separations to 2004: 20
\*Total Openings: 60

**New Job Growth Rate:** 28.6%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 13 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 216

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

<sup>\*7</sup> year period 1997 through 2004.

## LOAN AND CREDIT CLERKS

## **OES 531210**

Loan and Credit Clerks assemble documents, prepare papers, process applications, and complete transactions of individuals applying for loans and credit.

Loan Clerks review loan papers to insure completeness; operate typewriters to prepare correspondence, reports, and loan documents from draft; and complete transactions between a loan establishment, borrowers, and sellers upon approval of loan. Credit Clerks interview applicants to obtain personal and financial data, determine credit worthiness, process applications, and notify customer of acceptance or rejection of credit. Does not include Loan Interviewers.

<u>Alternate Job Titles:</u> Loan Administrators, Loan Processor, Credit Analyst, Information Processors, Note Processors, Financial Services Specialist, Visa Coordinator, Loan Assistant, Professional Financial Representative.

**Related DOT Codes:** 205.367-022, 249.362-018, 249.362-018, 249.362-038

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All firms (100%) require a high school diploma or equivalent.

**Training:** Almost all firms (88%) do not require technical or vocational training. Some firms (24%) allow 3 - 6 months training in Mortgage Banking training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet and database computer software skills.

**Experience:** Almost all firms (82%) do not require related work experience, but prefer applicants with of 6 - 12 months prior experience as a Loan or Credit Clerk. Most firms (71%) do not accept other occupational experience.

# **Skills rated "very important":**

Ability to read and follow instructions

Oral communication skills

Interpersonal and customer service skills

Ability to pay attention to detail

Telephone answering skills

Ability to check loan applications for accuracy

Ability to work under pressure and meet deadlines

Ability to keep accurate records

Ability to work independently

Ability to interview others for information

Organizational skills

Ability to perform routine repetitive work

Ability to write legibly

Basic math skills

Interpersonal skills

Ability to work on a team

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Processing Supervisor, Loan Officer, Underwriter, Operations Supervisor, Financial Services Manager, Credit Analyst.

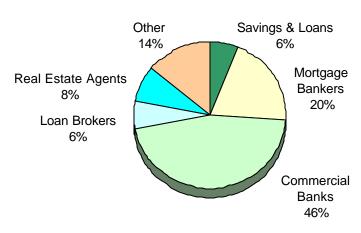
### **Nontraditional Occupation:** No.

77% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

**Unionization:** None reported.

## WHERE THE JOBS ARE



## FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	E'ee Pays All
Medical Insurance:	53%	35%	0%
Dental Insurance:	53%	29%	6%
Vision Insurance:	47%	24%	6%
Life Insurance:	53%	24%	6%
Paid Sick Leave:	76%	12%	0%
Paid Vacation:	82%	12%	0%
Retirement Plan:	59%	12%	12%
Child Care	12%	0%	6%

Other employer specified: 401-K Plan

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer.

**Others include:** Private employment agencies, internet, colleges and universities, walk-in applicants.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Loan and Credit Clerks

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

## **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (91%) Loan and Credit Clerks work full-time, 40 hours per week. A few (9%) work part-time, 24 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.25 - 10.00	\$8.75
New Hires, With Experience:	\$7.50 - 12.72	\$10.00
After Three Years With the Firm:	\$9.00 - 15.14	\$12.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 180

Separations to 2004: 150

\*Total Openings: 330

**New Job Growth Rate:** 8.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

## **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.

10 project employment to remain stable and 7 expect employment to grow over the next two years.

**Education / Training Providers:** See Appendix A, page 217

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

MACHINISTS OES 891080

Machinists set up and operate machine tools and fit and assemble parts to make or repair metal parts, mechanisms, tools or machines by applying their knowledge of mechanics, shop mathematics, metal properties, and layout machining procedures. They study specifications, such as blueprints, sketches, or descriptions of parts to be replaced, and they plan sequences of operations.

Alternate Job Titles: None reported

**Related DOT Codes:** 600.280-022, 600.280-034, 600.280-042

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have a high school diploma or equivalent and a few have some college (but not necessarily a degree).

**<u>Training:</u>** Most firms usually allow training to substitute for work experience. Employers prefer applicants with 2 years vocational training as a machinist.

**Experience:** Many firms always require related work experience. They prefer applicants with 1 - 3 years experience as a Machinist or CNC Machinist (Computerized Numerical Control).

## **Skills rated "very important":**

Ability to perform precision work

Ability to use precision tools

Ability to work independently

Ability to work as part of a team

Ability to read and follow instructions

Ability to operate lathes, drill presses and milling machines

Oral communication skills

Ability to read blueprints

Ability to use handtools

Manual dexterity

Shop math skills

Ability to operate numerically controlled (NC) machines

Ability to stand for long periods of time

Ability to work under pressure

### **OCCUPATIONAL CHARACTERISTICS**

Career Ladders: Promote to: Lead Machinist, Shop

Foreman, and Shop Manager.

Nontraditional Occupation: Yes.

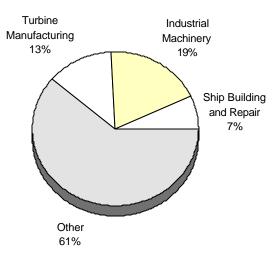
No workers in survey responses were female.

**Turnover:** Moderately low, 8% in the past 12 months.

**Unionization:** Yes. 13% of employers and 52% of employees

were unionized.

# WHERE THE JOBS ARE



<u>Full-Time</u>
100%
57%
29%
57%
50%
93%
50%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, unsolicited applicants, private employment agencies, and Employment Development Department.

## SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	v	v
A Little Difficult	*	X
Not Difficult		

Job Market for: Machinists

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Machinists work full-time, 40 hours per week.

<b>Hourly Wages</b>	Range	Median
New Hires, No Experience: Union:	\$5.75 -12.00 \$10.00 -10.25	\$7.00 \$10.13
New Hires, With Experience: Union:	\$6.75 -15.00 \$11.00 - 16.00	\$12.00 \$13.50
After Three Years With the Firm: Union:	\$8.00 -19.00 \$15.00 -22.00	\$16.00 \$18.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 590

Separations to 2004: 790

\*Total Openings: 1,380

**New Job Growth Rate:** 12.1%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
8 project employment to grow and 7 expect employment to remain stable over the next three years.

**Education / Training Providers:** See Appendix A, page 217

#### **Key Terms:**

# MAINTENANCE REPAIRERS, GENERAL UTILITY

### **OES 851320**

Maintenance Repairers perform work involving two or more maintenance skills to keep the machines, mechanical equipment and/or structure of an establishment in repair. This occupation is generally found in a small establishment where specialization in maintenance work is impractical. Their duties may involve pipefitting, boilermaking, insulating, welding, machining, machine and equipment repairing, carpentry and electrical work, as well as planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, aligning and balancing new equipment; and repairing buildings, floors or stairs.

Alternate Job Titles: Maintenance Workers, Maintenance Engineers

**Related DOT Codes:** 899.261-014, 899.381-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have some college (but not necessarily a degree). A few have a high school diploma or equivalent.

**Training:** Many employers never allow training to substitute for work-related experience.

**Experience:** Almost all firms usually require related work experience. Employers prefer applicants with 2 - 4 years prior experience as a maintenance repairer.

### Skills rated "very important":

Ability to read and follow instructions

Ability to lift 50 lbs.

Troubleshooting skills

Ability to work independently

Oral communication skills

Heating / air conditioning repair skills

Minor electrical repair skills

Minor plumbing skills

Minor carpentry skills

Minor painting skills

Ability to work on a team

Customer service skills

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Maintenance Lead or Supervisor.

Nontraditional Occupation: Yes.

7% of workers in survey responses were female.

**Turnover:** Moderate, 20% in the past 12 months.

**Unionization:** Yes.

27% of employers surveyed were unionized. 42% of employees were unionized.

### WHERE THE JOBS ARE

Amusement and Recreational Parks
Building Maintenance and Repair Services
Construction Contractors
Government Facilities
Hospitals
Hotels & Motels
Office Buildings and Industrial Parks
Schools and Colleges
Shopping Centers
Utility Companies

	Full-Time
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	67%
Life Insurance:	80%
Paid Sick Leave:	80%
Paid Vacation:	93%
Retirement Plan:	27%

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, unsolicited applicants, employee referrals, in-house promotion or transfer.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Maintenance Repairers** *Experienced* applicants: **Competitive** 

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all General Utility Maintenance Repairers work full-time, 40 hours per week.

Hourly Wages	Range	Median
Սգլար:Tires, No Experience:	\$6.50 - 12.25 \$5.75 - 12.00	\$8.00 \$8.50
NewnHires, With Experience:	\$7.75 - 17.00 \$6.50 - 14.25	\$10.00 \$9.00
AfternThree Years With the Firm:	\$9.00 - 18.00 \$8.75 - 19.75	\$15.00 \$13.50

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 2,340
Separations to 2004: 1,630
\*Total Openings: 3,970

**New Job Growth Rate:** 22.5%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

**Education / Training Providers :** See Appendix A, page 217

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### MASSAGE THERAPISTS

334374999

Massage Therapists massage customers and administer other body conditioning treatments for hygienic or remedial purposes. They apply alcohol, lubricants, or other rubbing compounds. They massage the body, using such techniques as kneading, rubbing, and stroking the flesh. They administer steam or dry heat, ultraviolet or infrared, or water treatments. They may counsel clients in activities such as reducing or remedial exercises, and body conditioning or treatments.

Alternate Job Titles: Masseuse, Masseur, Licensed Massage Therapists, Body Workers, Holistic Health Practitioners

Related DOT Codes: 334.374-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (87%) require a high school diploma or equivalent.

**Training:** Almost all firms (80%) require 6 - 12 months technical or vocational training. 500 hours training is required for certification as a Licensed Massage Therapist and 1000 hours for a Holistic Health Practitioner. Some firms (33%) accept training as a substitute for related work experience. Massage Therapists practicing within the city limits of San Diego must be registered with the San Diego Police Department.

**Experience:** Many firms (47%) require 6 - 18 months related work experience. None accept other occupational experience.

# **Skills rated "very important":**

Cleanliness and professional image

Positive attitude

Ability to work independently

Ability to perform Swedish massage

Interpersonal and customer service skills

Ability to perform massage techniques in cases of injury

Ability to apply massage techniques for sports injuries

Ability to perform deep tissue massage

Knowledge of kinesiology

Oral communication skills

Massage Therapist certification by the state

Knowledge of of anatomy, physiology, psychology, physical therapy, nutrition

Possession of a local license issued by the San Diego Police Department

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Masseuse, Head

Therapist.

Nontraditional Occupation: No.

57% of workers in survey responses were female.

**Turnover:** Moderately low, 10% in the past 12 months.

**Unionization:** None reported.

### WHERE THE JOBS ARE

The nature of employment in this occupation tends to be that of an independent contractor. Other opportunities include business ownership or self employment. However employment opportunities exist at:

### Industry

Chiropractic Clinics
Holistic Heath Centers
Hotels, Resorts and Spas
Physical Fitness and Workout Centers
Sports Therapy Centers

# FRINGE BENEFITS, WHO PAYS

### **Part Time Employees**

<b>Shared Cost</b>	Not Provided
44%	56%
22%	78%
22%	78%
22%	78%
33%	67%
33%	67%
22%	78%
0%	100%
	22% 22% 22% 33% 33% 22%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, school and program referrals.

Others include: Internet, walk-in applicants.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		Х
Few Employers Hire		

Job Market for: Massage Therapists

Experienced applicants: Little competition in job search Inexperienced applicants: Very competitive job search

### **HOURS, SHIFTS AND WAGES**

**Average Weekly Hours:** Many Massage Therapists work part-time (46%), 17 hours per week or on a temporary or on-call basis (53%), 15 hours per week.

**Shifts:** Almost all employers (93%)report having day shifts. Some also have swing (33%) and graveyard shifts (27%).

Hourly Wages	Range	Median
New Hires, No Experience: With Commissions:	\$8.50 - 20.00 \$8.50 - 25.00	\$17.50 \$20.00
New Hires, With Experience: With Commissions:	\$12.00 - 30.00 \$12.00 - 55.00	\$20.00 \$22.00
After Three Years With the Firm: With Commissions:	\$14.00 - 60.00 \$14.00 - 60.00	\$25.00 \$30.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Not available **OES Growth Projections:** Not available

New Job Growth Rate: Not available

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
10 project employment to grow and 5 expect employment to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 218

#### **Key Terms:**

### MEDICAL AND CLINICAL LABORATORY ASSISTANTS

### **OES 329050**

Medical and Clinical Laboratory Assistants perform routine tasks in a medical laboratory. They may set up and operate automated equipment which does not require interpretation or judgement to read the results. They may label, centrifuge and transfer specimens, transcribe results and prepare culture media and reagents. They may also perform venipuncture if certified to do so. They work under the supervision of a Medical Laboratory Technologist.

Alternate Job Titles: Technology Assistants, Phlebotomists, Laboratory Assistants/Technicians

Related DOT Codes: 078.381-014, 079.364-022, 559.361-010

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have some college (but not necessarily a degree). A few have an associate degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 5 -12 months medical or general laboratory training and having a Phlebotomy Certificate or CPR training and have word processing, spreadsheet and database software skills.

**Experience:** Many firms sometimes require related work experience. They prefer applicants with 1 - 2 years experience as a Phlebotomist, Medical Laboratory Assistant, Medical Assistant or Laboratory Technician.

# **Skills rated "very important":**

Ability to follow safe laboratory practices

Ability to pay attention to detail

Read and follow instructions

Ability to clean and sterilize laboratory equipment

Ability to concentrate for long periods of time

Ability to write legibly

Good vision and manual dexterity

Oral communication skills

Ability to work independently

Knowledge of medical terminology

Ability to operate precision laboratory equipment

Data entry and record keeping skills

Willingness to work with close supervision

Knowledge of inventory techniques

Basic math skills

Ability to draw blood

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Laboratory Assistant / Manager, Laboratory Assistant II, III, and Medical Technologist with training.

### **Nontraditional Occupation:** No.

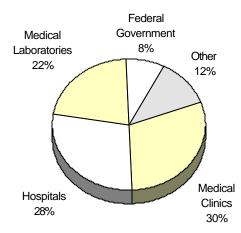
76% of workers in survey responses were female.

**Turnover:** Moderately low, 9% in the past 12 months.

**Unionization:** Yes. 12% of employers and 3% of employees

were unionized.

# WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	94%	6%
Dental Insurance:	81%	6%
Vision Insurance:	63%	6%
Life Insurance:	75%	
Paid Sick Leave:	94%	6%
Paid Vacation:	94%	6%
Retirement Plan:	88%	

Other: 401-K Plan, 125 Cafeteria Plan

### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, unsolicited applicants, public school or program referrals, in-house promotion or transfer, Regional Occupational Program, Medical Publications, and Telephone Job Line.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	х	
A Little Difficult		Х
Not Difficult		

Job Market for: Medical and Clinical Laboratory Assistants

Experienced applicants: Somewhat competitive

Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Almost all Medical and Clinical Laboratory Assistants work full-time, 40 hours per week. A few work part-time 23 hours per week, or on a temporary or on call basis, 20 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.75 - 10.50	\$8.00
New Hires, With Experience:	\$7.75 - 13.00	\$9.50
After Three Years With the Firm:	\$10.00 - 17.00	\$12.34

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - less than 1,662

**OES Growth Projections:** New jobs through 2004: 150

Separations to 2004: 60
\*Total Openings: 210

**New Job Growth Rate:** 16.2%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

### **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.

10 expect employment to remain stable and 7 project employment to grow over the next three years.

Education / Training Providers: See Appendix A, page 219

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

<sup>\*7</sup> year period 1997 through 2004.

# **MEDICAL ASSISTANTS**

# **OES 660050**

Medical Assistants perform various duties under the direction of physicians in the examination and treatment of patients. They prepare treatment room, inventory supplies and instruments and set up patients for attention of physician, handing instruments and materials to physician as directed. They may schedule appointments, keep medical records or perform other clerical duties.

Alternate Job Titles: Certified Medical Assistants

Related DOT Codes: 079.362-010

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Many recent hires have some college (but not necessarily a degree). Some have a high school diploma or equivalent.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 year Medical Assistant training and have passed the Certified Medical Assistant (CMA) exam administered by the American Association of Medical Assistants or the Registered Medical Assistant (RMA) awarded by the American Medical Technologists. Medical Assistants must have documentation of their completion of training required by state law. Employers prefer applicants with database, word processing and spreadsheet software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 year experience as a Medical Assistant, Front Office Desk Assistant or Medical Billing Clerk.

# **Skills rated "very important":**

Oral communication skills
Read and follow instructions
Ability to work independently
Customer service and interpersonal skills
Record keeping skills
Ability to obtain a Medical Assistant Certificate
Ability to write effectively and legibly
Ability to handle crisis situations
Knowledge of medical terminology
Telephone answering skills
Willingness to work with close supervision
Willingness to work with elderly
Ability to apply sterilization techniques

Knowledge of medications and medical supplies

Neat and clean appearance Knowledge of health care plans

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Clinic/Department Coordinator, Lead Medical Assistant, and Office Supervisor/ Manager.

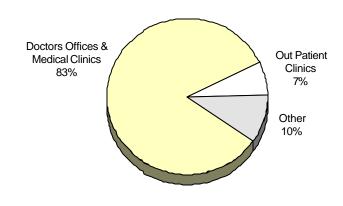
Nontraditional Occupation: No.

97% of workers in survey responses were female.

**Turnover:** Moderate, 13% in the past 12 months.

**Unionization:** None reported

# WHERE THE JOBS ARE Industry - Percent Employing



	<u>Full-Time</u>
Medical Insurance:	88%
Dental Insurance:	56%
Vision Insurance:	25%
Life Insurance:	44%
Paid Sick Leave:	88%
Paid Vacation:	88%
Retirement Plan:	69%

Other: 401-K Plan, Paid Holidays, Tuition Reimbursement

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, public school or program referral, employee referrals, unsolicited applicants, San Diego Career Center Network, and Regional Occupation Program.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: **Medical Assistants** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Medical Assistants work full-time, 40 hours per week. Some work part-time, 25 hours per week. A few work on a temporary or on-call basis, 25 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 8.00	\$7.50
New Hires, With Experience:	\$8.00 - 11.00	\$9.00
After Three Years With the Firm:	\$9.00 - 13.00	\$10.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 900

Separations to 2004: 460

\*Total Openings: 1,360

**New Job Growth Rate:** 29.4%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

11 expect employment to remain stable, 4 project employment to grow and 1 expects employment to decline over the next three years.

Education / Training Providers: See Appendix A, page 218

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# MEDICAL RECORDS TECHNICIANS

**OES 329110** 

Medical Records Technicians compile and maintain medical records of hospital and clinic patients.

Alternate Job Titles: Medical Records Clerks

Related DOT Codes: 079.362-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All recent hires have a high school diploma or equivalent.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 6 - 12 months of training in medical office procedures or medical records technology. Employers prefer applicants with word processing and database computer software skills.

**Experience:** Almost all firms sometimes require related work experience. They tend to hire applicants with 6 - 12 months experience as an office clerk, filing clerk or records clerk.

# **Skills rated "very important":**

Ability to concentrate and do accurate work

Ability to pay close attention to detail

Ability to handle confidentiality of records

Excellent alpha numeric filing skills

Oral communication skills

Ability to read and follow instructions

Ability to communicate with doctors and staff

Ability to write legibly

Data entry and retrieval skills

Ability to work independently

Ability to work under pressure

Computer skills

Organizational skills

Ability to work on a team and with others

Ability to move heavy file carts

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Receptionist Administrative Assistant, Patient Services Representative.

### Nontraditional Occupation: No.

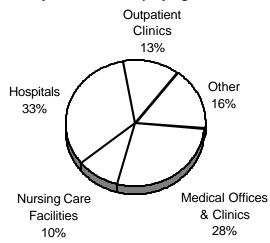
81% of workers in survey responses were female.

**Turnover:** High, 39% in the past 12 months.

#### Unionization: Yes.

7% of employers surveyed were unionized 14% of employees were unionized

#### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	93%
Dental Insurance:	93%
Vision Insurance:	43%
Life Insurance:	93%
Paid Sick Leave:	93%
Paid Vacation:	86%
Retirement Plan:	71%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, unsolicited applicants, employee referral, newspaper advertisements, Employment Development Department, private school referrals, public school or program referrals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Medical Records Technicians** 

Experienced applicants: Competitive

Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Medical Records Technicians work full-time, 40 hours per week. Some work part-time, 24 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$5.25 - 13.75	\$7.25
New Hires, With Experience:	\$5.75 - 16.00	\$8.25
After Three Years With the Firm:	\$6.50 - 21.00	\$9.50

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 190

Separations to 2004: 120
\*Total Openings: 310

**New Job Growth Rate:** 23.5%\*. Projected growth is faster than

the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 219

#### **Key Terms:**

### MEDICINE AND HEALTH SERVICE MANAGERS

### **OES 150080**

Medicine and Health Services Managers plan, organize, direct, control, or coordinate medicine and health services in establishments, such as hospitals, clinics, or similar organizations.

Alternate Job Titles: Medical Services Director, Case Management Supervisor, Director of Nursing, Social Service Manager, Clinic Director/Manager/Administrator, Program Manager, Director of Support Services, Office Manager, Department Supervisor/Administrator, Scheduling Coordinator, Health Center Director, Director of Operations, Health Manager.

Related DOT Codes: 075.117-014, 075.117-027, 079.117-010, 079.167-014, 187.117-010, 187.117-058, 187.117-062

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (61%) require a bachelor degree. Some (22%) require completed graduate studies and a few (17%) have an associate degree.

**Training:** No firms allow training to substitute for work experience. Some firms (28%) require technical or vocational training. Employers prefer applicants trained in medical terminology, have a nursing certificate and word processing, spreadsheet and medical database computer software skills.

**Experience:** Almost all firms (89%) require 1 - 5 years related work experience. Most employers (78%) accept other occupational experience such as 1 - 5 years experience as a Registered Nurse, Social Worker, Mental Health Counselor or an administrator in the health care field. Responding employers report rarely hiring inexperienced applicants.

### Skills rated "very important":

Oral communication skills

Ability to handle crisis situations

Problem solving skills

Ability to work independently

Ability to work under pressure

Supervisory skills

Ability to train new staff

Knowledge of medical office management

Knowledge of OSHA safety standards

Ability to coordinate activities with other departments

Report writing skills

Willingness to work long hours, nights, weekends and holidays

Ability to hire staff

Knowledge of medical health insurance programs

Customer service/public relations skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Division Director, Department/Program Director, Health Director, Assistant Administrator, Director of Nursing, Nurse Consultant. Regional Vice President.

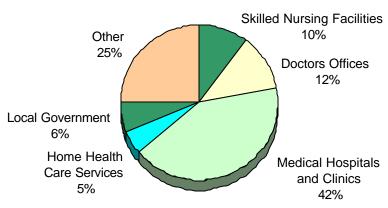
### Nontraditional Occupation: No.

81% of workers in survey responses were female.

**Turnover:** Moderate, 17% in the past 12 months.

**Unionization:** None reported.

### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	67%	33%	0%
Dental Insurance:	50%	33%	11%
Vision Insurance:	39%	22%	22%
Life Insurance:	56%	28%	11%
Paid Sick Leave:	94%	6%	0%
Paid Vacation:	94%	6%	0%
Retirement Plan:	56%	39%	6%
Child Care	0%	0%	100%

Other employer specified: Education Reimbursement, Paid Holidays, Stock Options, Long Term Disability

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer.

Others include: Internet, trade journals, medical industry networking.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		
Few Employers Hire		Х

Job Market for: **Medicine and Health Services Managers** *Experienced* applicants: **Little competition in job search** *Inexperienced* applicants: **Very competitive job search** 

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (99%) Medicine and Health Services Managers work full-time, 44 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range *	Median*
New Hires, No Experience:	\$10.15 - 15.34	\$12.75
New Hires, With Experience:	\$11.67 - 25.11	\$18.59
After Three Years With the Firm:	\$12.00 - 36.50	\$25.29

<sup>\*</sup>Some employees may have higher compensation due to bonuses.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 230

Separations to 2004: 250

\*Total Openings: 480

**New Job Growth Rate:** 14.0%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.

10 project employment to remain stable, 6 expect employment to grow, and 2 expect employment to decline over the next two years.

Education / Training Providers: See Appendix A, page 220

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

### **MULTIMEDIA SPECIALISTS**

# 030064996

Multimedia Specialists work in one or more of the following phases of multimedia production: planning and storyboards (quick sketches of the different scenes that will happen), scriptwriting, graphics, digital sound recording and mixing, scanning and retouching of photos, making the related scenes interactive using specialized computer software and simple programming language.

Alternate Job Titles: Director of Digital Media, Technical Director, Lighting Director, Graphic Design Editor, MPEG Compressionist, Graphic Designer, Creative Services Associate, Creative/Art Director, Associate/Promotions Producer, Post Production Editor, Videographer, Graphic Operators, Graphic Artist, Video Producer, Video Tape Editor, Creative Designers, Sound Designers, Multi Media Designers, Web Developer

Related DOT Codes: 141.131-010, 141.061-22, 142.061-062, 143.062-018, 194.382-018, 194.262-018, 962.132-010, 962.262-010

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms (44%) require a bachelor degree. Some require either an associate degree (25%) or a high school diploma or equivalent (31%).

**Training:** Many firms (53%) allow 6 - 24 months training to substitute for work experience. Few firms (13%) require technical or vocational training. Employers prefer applicants with word processing, spreadsheet and other digital editing software skills.

**Experience:** Most firms (75%) require 1 - 3 years related work experience. Many firms (53%) accept other occupational experience such as 1 - 2 years experience in video production, software design, photography, graphics arts or visual communications.

### Skills rated "very important":

Ability to work under pressure and meet deadlines

Creativity and imagination

Ability to use computer software to design images

Oral communication skills

Ability to work independently

Ability to read and follow instructions

Customer service skills

Knowledge of print, electronic and film media

Willingness to work long longs

Ability to do layout and pasteup

Ability to draw or paint graphic material

Knowledge of the internet and web page design and HTML

Knowledge of visual layouts for television and film production

Knowledge of digital sound recording

Ability to write and edit scripts

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Graphics Supervisor, Technical Director, Producer, Director of Post Production, Senior Art Director, Executive Producer, Director of Digital Media, Creative Director, Promotions Manager.

#### Nontraditional Occupation: No.

34% of workers in survey responses were female.

**Turnover:** Very low, 5% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 34% of employees were unionized.

# WHERE THE JOBS ARE Industry

Advertising Agencies
Commercial Art and Graphic Design Studios
Electronic Game Manufacturers
Internet Site Design Companies
Motion Picture and Video Tape Production
Television Broadcasting Stations
Temporary Placement Agencies
Theatrical Production Companies

# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	56%	31%	6%
Dental Insurance:	50%	19%	25%
Vision Insurance:	44%	13%	38%
Life Insurance:	38%	13%	50%
Paid Sick Leave:	69%	13%	19%
Paid Vacation:	69%	13%	19%
Retirement Plan:	44%	13%	44%
Child Care	6%	0%	94%

Other employer specified: 401-K Plan, Education Reimbursement, Child Care Reimbursement, Profit Sharing

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, colleges and universities, internet.

Others include: Trade journals, in-house promotion or transfer.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Multimedia Specialists

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

### **HOURS, SHIFTS AND WAGES**

**Average Weekly Hours:** Many (54%) Multimedia Specialists work full-time, 44 hours per week or on a temporary or on-call basis (41%), 35 hours per week.

Shifts: All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$10.00 - 15.34	\$12.50
New Hires, With Experience:	\$10.00 - 18.00	\$13.85
After Three Years With the Firm:	\$12.79 - 30.00	\$18.09

<sup>\*</sup>Combined union and non-union wages.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
10 project employment to remain stable and 6 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 220

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

NURSE AIDES OES 660080

Nurse Aides work under the direction of nursing or medical staff to provide auxiliary services in the care of patients. They perform duties such as answering patients' call bells, serving and collecting food trays and feeding patients. Nurse Aides may be called Assistants, Attendants or Orderlies. Orderlies are primarily concerned with the care of male patients, setting up equipment and relieving nurses of heavier work. Does not include Psychiatric Aides and Home Health Aides.

Alternate Job Titles: Certified Nurse Aide, Nurse Attendant, Patient Care Giver

Related DOT Codes: 355.674-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have a high school diploma or equivalent. A few have some college (but not necessarily a degree).

**Training:** Many firms never allow training to substitute for work experience but require 12 months training to complete a Certified Nurse Assistant program. License and certification is obtained through Department of Health Services. Employers prefer applicants with word processing, spreadsheet and database software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 - 2 years experience as an Acute Care Giver, Nurse Assistant or Certified Nurse Assistant.

# **Skills rated "very important":**

Observation skills

Ability to read and follow instructions

Oral communication skills

Ability to take vital signs

Ability to write legibly

Ability to provide personal services to patients

Ability to lift and move patients

Ability to perform CPR

Knowledge of preventing infection (asepsis)

Record keeping skills

Nurses Aide Certification

Ability to handle crisis situations

Caring approach to patients

Dependability and reliability

Computer skills

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: with education, Medical Assistant, Licensed Vocational Nurse or Registered Nurse.

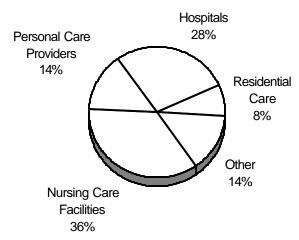
Nontraditional Occupation: No.

83% of workers in survey responses were female.

**Turnover:** High, 57% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 14% of employees surveyed.

# WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	100%	25%
Dental Insurance:	88%	25%
Vision Insurance:	81%	25%
Life Insurance:	81%	13%
Paid Sick Leave:	69%	25%
Paid Vacation:	100%	25%
Retirement Plan:	69%	25%

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Unsolicited applicants, newspaper advertisements, employee referrals, in-house promotion or transfer, public school or program referrals, private school referrals, Employment Development Department.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Nurse Aides

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Many Nurse Aides work full-time, 39 hours per week. Some work part-time, 21 hours per week and a few work on a temporary or on-call basis, 15 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$5.25 - 11.00	\$7.00
New Hires, With Experience:	\$6.25 - 11.00	\$7.50
After Three Years With the Firm:	\$7.00 - 13.00	\$9.00

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 720

Separations to 2004: 600

\*Total Openings: 1,300

**New Job Growth Rate:** 11.7%\*. Projected growth is slower when compared to the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years because of increased patient load and expanding facilities.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 220

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### OCCUPATIONAL THERAPY ASSISTANTS and AIDES

OES 660210

Occupational Therapy Assistants and Aides assist Occupational Therapists in administering medically oriented occupational program to assist in rehabilitating patients in hospitals and similar institutions.

Alternate Job Titles: Certified Occupational Therapy Assistants (COTA)

Related DOT Codes: 076.364-010

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have an associate degree.

**Training:** Many firms usually allow training to substitute for work experience. Employers prefer applicants with 2 years Occupational Therapy Assistant Training with a state certificate and also have word processing, spread sheet and data base software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 6 - 24 months experience as a Certified Occupational Therapy Assistant (COTA) and/or past experience as a Certified Nursing Assistant or Licensed Vocational Nurse in a managed care nursing facility.

# **Skills rated "very important":**

Interpersonal and customer service skills

Ability to motivate patients

Willingness to work with close supervision

Ability to demonstrate occupational therapy techniques

Ability to observe and record patient progress

Ability to read and follow instructions

Ability to write legibly

Knowledge of medical terminology

Ability to lift and move patients

Knowledge of anatomy of physiology

Ability to handle patients with developmental impairments

Knowledge of medical supplies

Ability to keep track of needed supplies

Knowledge of billing and health insurance procedures

Telephone answering skills

Ability to schedule patient appointments

Computer skills

### OCCUPATIONAL CHARACTERISTICS

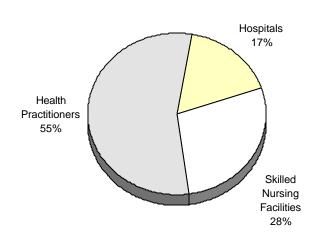
**Career Ladders:** No promotional opportunities reported.

**No.** 73% of workers in survey responses were female.

Turnover: Very low, 5% in the past 12 months.

**Unionization:** None reported

### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	91%
Dental Insurance:	91%
Vision Insurance:	82%
Life Insurance:	73%
Paid Sick Leave:	100%
Paid Vacation:	91%
Retirement Plan:	90%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, unsolicited applicants, public school or program referrals, and Occupational Therapy Interns.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: Occupational Therapy Assistants

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

**Average Weekly Hours:** Most Occupational Therapy Assistants work on a temporary or on-call basis, 14 hours per week. Some work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.75 - 15.00	\$12.38
New Hires, With Experience:	\$9.50 - 17.00	\$14.00
After Three Years With the Firm:	\$12.00 - 20.00	\$17.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662
OES Growth Projections: New jobs through 2004:

New jobs through 2004: 20 <u>Separations to 2004: 10</u> \*Total Openings: 30

**New Job Growth Rate:** 22.2%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

14 employers provided data to develop this profile.
6 expect employment to remain stable, 5 project employment to grow, and 3 expect employment to decline over the next three years.

**Education / Training Providers:** See Appendix A, page 221

#### **Key Terms:**

# **OPERATING ENGINEERS (Heavy Equipment Operators)**

**OES 979560** 

Operating Engineers operate several types of power construction equipment, such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers, or motor graders to excavate, move and grade earth, erect structures, or pour concrete or other hard surface paving. They may repair and maintain equipment in addition to other duties. Does not include workers who specialize in operation of a single type of heavy equipment such as bulldozer or crane.

Alternate Job Titles: Equipment Operator, Heavy Equipment Operator

**Related DOT Codes:** 859.683-010, 859.683-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have a high school diploma or equivalent. Some have attended college (but not necessarily obtained a degree).

**Training:** Many firms allow training to substitute for work experience. Employers prefer applicants with 12 - 18 months apprenticeship training, (union or non-union) leading to certification as a Heavy Equipment Operator.

**Experience:** Most firms always require related work experience. They prefer applicants with 2 - 3 years experience as Laborers, Graders, Shovel and Backhoe Operators.

# **Skills rated "very important":**

Knowledge of safe operating procedures

Good eye-hand-foot coordination

Oral communication skills

Ability to judge distances

Good sense of balance

Ability to read and follow instructions

Ability to tolerate a noisy working environment

Mechanical aptitude

Knowledge of earth excavation techniques

Ability to withstand weather extremes

Ability to tolerate fumes and odors

Ability to repair engine and perform routine maintenance

Critical thinking

Operating computerized equipment

### OCCUPATIONAL CHARACTERISTICS

**Career Ladders:** Promote to: Supervisor, Foreman

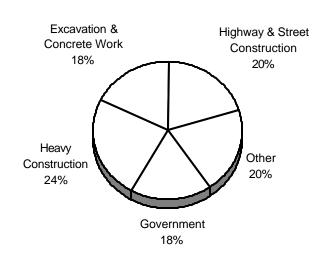
Nontraditional Occupation: Yes.

5% of workers in survey responses were female.

**Turnover:** Very low, 4% in the past 12 months.

<u>Unionization:</u> Yes. 31% of employers and 14% of employees surveyed.

### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	90%
Vision Insurance:	80%
Life Insurance:	40%
Paid Sick Leave:	10%
Paid Vacation:	90%
Retirement Plan:	70%

Other: 401-K Plan

# **Most Frequently Used Recruitment Methods:**

Unsolicited applicants, employee referrals, newspaper advertisements.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Operating Engineers (Heavy Equipment Operators)

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Operating Engineers work full-time, 42 hours per week.

Hourly Wages	Range *	Median <sup>*</sup>
New Hires, No Experience:	\$8.00 - 16.00	\$12.75
New Hires, With Experience:	\$12.00 - 22.50	\$16.00
After Three Years With the Firm:	\$16.00 - 33.00	\$20.00

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 250

<u>Separations to 2004:</u> \*Total Openings: 430

**New Job Growth Rate:** 24.0%\*. Projected growth is faster than

the county-wide average of 17.7%\*.
\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Many responding employers project employment to grow over the next three years because of new construction contracts.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 221

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **OPHTHALMIC TECHNICIANS**

#### A Sub Part of DOT 078.361-038

Ophthalmic Technicians test and measure eye function to assist Ophthalmologist to diagnose and treat eye disorders and disease: they test patient's far and/or near acuity, peripheral vision, depth perception and color perception to assist Ophthalmologist to diagnose and treat eye disorders and disease. Examine eye for abnormalities of cornea and anterior and posterior chambers. Apply drops to anesthetize, dilate or medicate eyes (glaucoma test). Measure axial length of eye. Perform other tests and measurements as requested by physician. They give instructions to patients concerning eye care. May supervise other technicians.

Alternate Job Titles: Ophthalmic Assistant, Certified Retinal Ophthalmic Technician

Related DOT Codes: 143.362-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Recent hires had either some college (but not necessarily a degree), an associate degree or a bachelor degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 12 months of training and possess an Ophthalmic Technician Certificate.

**Experience:** Many firms usually require related work experience. They prefer applicants with 6 - 12 months experience as an Ophthalmic / Optometric Assistant or Ophthalmic Technician.

# Skills rated "very important":

Ability to read and follow instructions

Oral communication skills

Ability to work independently

Ability to apply eye drops to patients

Ability to give eye care instructions to patients

Customer service and interpersonal skills

Ability to do precision work

Basic math skills

Ability to administer eye exams to patients

Knowledge of eye diseases

Knowledge of refractive techniques

Knowledge of refraction and visual field testing

Ability to work as a team member

Operating room skills

### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Office Manager

Nontraditional Occupation: No.

85% of workers in survey responses were female.

**Turnover:** Moderately high, 23% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE

Offices of Ophthalmologists Speciality Eye Surgery Clinics

<u>Full-Time</u>
100%
63%
75%
38%
100%
100%
38%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, industry newsletters.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Ophthalmic Technicians

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Ophthalmic Technicians work full-time, 40 hours per week and some work part-time, 26 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 13.00	\$9.75
New Hires, With Experience:	\$8.00 - 15.00	\$12.00
After Three Years With the Firm:	\$10.50 - 18.00	\$15.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 1,020
Separations to 2004: 720

\*Total Openings: 1,740

Openings for Ophthalmic Technicians are included in the general classification of Health Care Professionals and Para-Professionals not elsewhere classified.

**New Job Growth Rate:** 20.5%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

**Employer Outlook on Employment :** Many responding employers project employment to grow over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis

Education / Training Providers: See Appendix A, page 221

**Key Terms:** 

# PAINTER, PAPERHANGERS – CONSTRUCTION AND MAINTENANCE

**OES 874020** 

Painters paint walls, equipment, buildings, bridges, and other structural surfaces using brushes, rollers, and spray guns. They may mix colors or oils to obtain desired color or consistency. Paperhangers cover interior walls and ceilings of rooms with decorative wallpaper or fabric.

Alternate Job Titles: Structural Steel Painters, Industrial Painters, Marine Painters, Journey Level Painters

**Related DOT Codes:** 840.381-010, 841.381-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (80%) require a high school diploma or equivalent. Some (20%) require less than a high school education.

**Training:** Most firms (64%) allow training to substitute for work experience. None require technical or vocational training.

**Experience:** Most firms (73%) do not require related work experience, but have a preference for applicants with 6 - 24 months prior experience. Some firms (23%) accept other occupational experience such as 6 -24 months as Commercial, Industrial or Structural Painters.

# **Skills rated "very important":**

Knowledge of safe working practices

Ability to work on a team

Ability to do routine and repetitive work

Ability to pay attention to detail

Roller painting skills

Surface preparation skills

Brush painting skills

Ability to work under pressure and meet deadlines

Ability to stand continuously for 2 or more hours

Ability to use hand and power tools

Ability to work independently

Spray painting skills

Ability to work from ladders and scaffolds

Ability to use and read a tape measure

Ability to tolerate dust and paint fumes

Possession of a valid drivers license and reliable vehicle

Oral communication skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Painter, Foreman, Supervisor, Quality Assurance Manager.

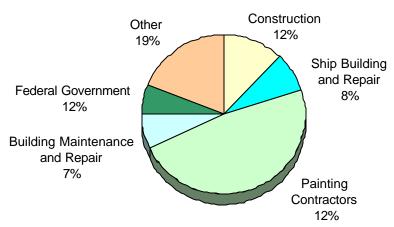
### **Nontraditional Occupation:** Yes.

4% of workers in survey responses were female.

**Turnover:** Moderately high, 24% in the past 12 months.

**Unionization:** Yes. 7% of employers and 4% of employees were unionized.

### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

E'er Pays All	<b>Shared Cost</b>	Not Provided
60%	13%	20%
47%	13%	33%
47%	13%	33%
47%	13%	33%
53%	7%	33%
60%	7%	27%
40%	13%	40%
0%	0%	93%
	60% 47% 47% 47% 53% 60% 40%	60%       13%         47%       13%         47%       13%         47%       13%         53%       7%         60%       7%         40%       13%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, walk-in applicants.

Others include: Job fairs, job postings.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Painters

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

### **HOURS, SHIFTS AND WAGES**

**Average Weekly Hours:** Almost all (89%) Painters work full-time, 40 hours per week. A few (11%) work part-time, 27 hours per week.

**Shifts:** All employers (100%) report having day shifts. A few (7%) have swing or graveyard shifts.

Hourly Wages*	Range*	Median*
New Hires, No Experience:	\$5.75 - 7.50	\$6.00
New Hires, With Experience:	\$7.00 - 14.25	\$9.00
After Three Years With the Firm:	\$8.00 - 16.00	\$11.00

<sup>\*</sup>Combined union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 700

Separations to 2004: 430

\*Total Openings: 1,130

New Job Growth Rate: 28.3%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile. 8 project employment to grow and 7 expect employment to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 221

#### **Key Terms:**

# PARALEGAL PERSONNEL

### **OES 283050**

Paralegal Personnel assist lawyers by doing research in the preparation of lawsuits and/or legal documents as a career professional, usually having either a four-year college degree or a degree from an institute specializing in the paralegal profession. They may gather research data for use as evidence to formulate defense or to initiate legal action.

Alternate Job Titles: None

Related DOT Codes: 119.267-026

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have either a bachelor degree or an associate degree.

**Training:** Some firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years of paralegal training who have word processing, database and spreadsheet computer software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 2 - 3 years prior experience as a paralegal.

### Skills rated "very important":

Ability to read and follow instructions

Ability to comprehend legal information

Ability to use a computer

Oral communication skills

Ability to work on a team

Knowledge of legal terminology

Knowledge of court proceedings

Ability to work independently

Problem solving skills

Record keeping skills

Certification as a Legal Assistant

Ability to write effectively

Willingness to work overtime and irregular hours

Interpersonal skills

On-line research skills

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Attorney with additional education and passing the Bar Exam.

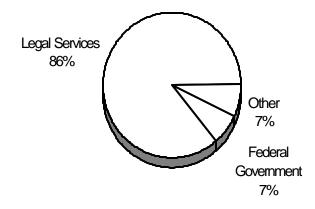
Nontraditional Occupation: No.

89% of workers in survey responses were female.

**Turnover:** Moderately low, 8% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	75%
Vision Insurance:	56%
Life Insurance:	75%
Paid Sick Leave:	94%
Paid Vacation:	94%
Retirement Plan:	63%

Other: 401-K Plan

\*The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, private employment agencies, in-house promotion or transfer, Paralegal Association.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Paralegal Personnel** *Experienced* applicants: **Competitive** 

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Paralegal Personnel work full-time, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.00 - 15.50	\$13.00
New Hires, With Experience:	\$12.75 - 20.50	\$15.75
After Three Years With the Firm:	\$15.00 - 24.00	\$19.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 500

<u>Separations to 2004:</u> 90 \*Total Openings: 590

**New Job Growth Rate:** 38.5%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 221

#### **Key Terms:**

### PERSONAL AND HOME CARE AIDES

**OES 680350** 

Personal and Home Care Aides perform a variety of tasks at places of residence. Their duties include keeping house; advising families having problems with such things as nutrition, health, cleanliness, and household utilities. Does not include Nurses' Aides and Home Health Care Workers.

<u>Alternate Job Titles:</u> Home Care Companions, Care Givers, Homemaker/Companions, Live-ins, Overnighters, Personal Care Home Companions, Caretakers, Transporters

Related DOT Codes: 309.354-010, 359.573-010

### **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms require either less than a high school education (53%) or a high school diploma or equivalent (47%).

**Training:** Many firms (64%) allow 3 to 12 months home care training to substitute for work experience. A few firms (20%) require technical or vocational training.

**Experience:** Many firms (40%) do not require related work experience, but prefer applicants with 6 - 24 months prior experience. Some firms (30%) accept other occupational experience such as 6 - 12 months of nursing or medical experience.

# **Skills rated "very important":**

Ability to work with the elderly and disabled

Ability to work independently

Ability to handle emergencies

Ability to provide personal care services

Ability to read and follow instructions

Observational skills

Documentation skills

Knowledge of infection control

Ability to prepare meals

Ability to provide housekeeping services

Knowledge of patient transferring techniques

Willingness to work part-time or on-call

Willingness to work nights, weekends, holidays

Regular use of a reliable vehicle

Possession of a valid drivers license

Oral communication skills

Pass a pre-employment examination

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: (with additional education)
Certified Home Health Aide, Certified Nurse Assistant,
License Vocational Nurse, Registerd Nurse and Office Manager

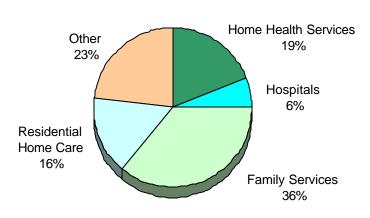
### **Nontraditional Occupation:** No.

91% of workers in survey responses were female.

**Turnover:** Moderately high, 24% in the past 12 months.

Unionization: None reported.

### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

	Full-time	Part-time
	Not Provided	Not Provided
Medical Insurance:	58%	67%
Dental Insurance:	75%	75%
Vision Insurance:	75%	75%
Life Insurance:	67%	75%
Paid Sick Leave:	75%	75%
Paid Vacation:	58%	58%
Retirement Plan:	67%	75%
Child Care	83%	92%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, school and program referrals.

Others include: Trade journals, in-house promotion or transfer.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Personal and Home Care Aides

Experienced applicants: Little competition in job search

Inexperienced applicants: Little competition in job search

### **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Some Personal and Home Care Aides work full-time (36%), 40 hours per week; or part-time (38%), 25 hours per week; or on a temporary or on-call basis (22%), 21 hours per week.

**Shifts:** All employers (100%) report having day and swing shifts. Most (93%) also have graveyard shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 7.00	\$6.13
New Hires, With Experience:	\$6.25 - 8.00	\$7.00
After Three Years With the Firm:	\$7.00 - 10.00	\$8.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 580

<u>Separations to 2004:</u> \*Total Openings: 210

New Job Growth Rate: 43.0%\*. Projected growth is much faster

than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.

14 project employment to grow and 1 expects employment

to remain stable over the next two years.

**Education / Training Providers:** No formal education or training program for this occupation.

#### **Key Terms:**

### PERSONNEL TRAINERS

### 166227999

Personnel Trainers develop and conduct in-house training programs for employees of the organization for which they work. They confer with management to gain knowledge of work required training. They formulate training outlines and determine the most effective instructional methods such as: individual or group instruction, lectures, conferences, meetings and workshops. They select or develop training aids. They conduct training focused on topics such as: new employee orientation, on-the-job training, use of computers and software, sales techniques, health and safety practices, public relations, refresher training, promotional development, and leadership development. They may test trainees to measure progress and to evaluate effectiveness of training. They may specialize in developing instructional software.

Alternate Job Titles: Development Trainers, Organizational Effectiveness Specialists, Training Specialists/Analysts/Coordinators

**Related DOT Codes:** 166.167-054, 169.167-062, 166.221-010

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree and some have completed graduate studies.

**Training:** Most firms never allow training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet, database, desktop publishing, Powerpoint and Internet software skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 2 - 5 years prior experience as a Trainer, Educator, Teacher or Training Specialist.

### Skills rated "very important":

Customer service skills

Oral communication and verbal presentation skills

Ability to read and follow instructions

Ability to operate a computer

Ability to meet deadlines

Interpersonal skills

Ability to plan and organize training programs

Ability to coordinate and direct staff development programs

Ability to conduct training programs

Ability to motivate employees

Ability to use multimedia and visual aides in presentations

Ability to work independently

Ability to evaluate training programs and develop training manuals

Ability to set up individualized training programs

Ability to formulate company training policies

Ability to manage a budget

Ability to supervise staff

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Senior Trainer, Associate Trainer, Training Specialist II, III, IV, and Training Manager.

Nontraditional Occupation: No.

72% of workers in survey responses were female.

**Turnover:** Moderately high, 26% in the past 12 months.

Unionization: None reported

### WHERE THE JOBS ARE

Jobs can be found in all industries both public and private such as:

Finance Government Hospitality Manufacturing

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	93%
Vision Insurance:	86%
Life Insurance:	100%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	100%
Child Care:	7%

Other: 401-K plan, Profit Sharing, Yearly Bonus

### **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, employee referrals, newspaper advertisements, private employment agencies, professional recruiters, and Internet web site.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	Х
A Little Difficult		
Not Difficult		

Job Market for: Personnel Trainers

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Personnel Trainers work full-time, 41 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$11.00 - 28.75	\$14.38
New Hires, With Experience:	\$13.50 - 38.25	\$19.18
After Three Years With the Firm:	\$16.50 - 48.00	\$25.57

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Not available OES Growth Projections: Not available

New Job Growth Rate: Not available

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
8 project employment to grow and 7 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 222

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### PHARMACY TECHNICIANS

### **OES 325180**

Pharmacy Technicians fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations, and informing the supervisor of stock needs and shortages. They may clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies.

Alternate Job Titles: Pharmacy Computer Assistants, Pharmacy Clerks, Pharmaceutical Assistant

Related DOT Codes: 074.382-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms require an associate degree (44%) or require a high school diploma or equivalent (56%).

**Training:** Almost all firms (89%) allow training to substitute for work experience. Many firms (56%) require technical or vocational training. Training in formal Pharmacy Technician programs is 720 hours. A few employers provide on-the-job training lasting up to 1200 hours. Employers prefer applicants with database computer software skills. Pharmacy Technicians are licensed by the Board of Pharmacy.

**Experience:** Some firms (31%) require related work experience. They prefer 6-24 months prior experience. No firms accept other occupational experience.

### **Skills rated "very important":**

Ability to read and follow instructions

Ability to pay close attention to detail

Oral communication skills

Ability to follow regulations and reporting requirements

Public contact and customer service skills

Ability to stand for long periods of time

Ability to prepare, package and distribute medications

Basic math skills

Ability to measure and calculate using metrics

Ability to work under pressure

Ability to work with close supervision

Ability to work independently

Knowledge of medical and pharmaceutical terminology

Ability to calculate weights and measures

Ability to apply sterilization and aseptic techniques

Record keeping skills

Good eyesight and color vision

Ability to prepare intravenous (IV) packs

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Senior Pharmacy Technician, Pharmacy Technician II, Pharmacist (with additional education).

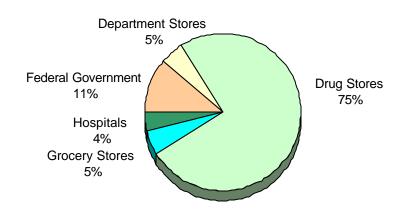
### Nontraditional Occupation: No.

79% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

**Unionization:** Yes. 31% of employers and 50% of employees were unionized.

### WHERE THE JOBS ARE



### FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	Shared Cost	Not Provided
Medical Insurance:	56%	6%	6%
Dental Insurance:	50%	6%	13%
Vision Insurance:	50%	6%	13%
Life Insurance:	38%	6%	25%
Paid Sick Leave:	44%	6%	19%
Paid Vacation:	50%	6%	13%
Retirement Plan:	50%	6%	13%
Child Care	0%	6%	63%

Other employer specified: 401-K Plan

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, school and program referrals.

**Others include:** Walk-in applicants, Regional Occupational Programs, internet.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		Х
Few Employers Hire		

Job Market for: Pharmacy Technicians

Experienced applicants: Little competition in job search Inexperienced applicants: Very competitive job search

### **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Most (70%) Pharmacy Technicians work full-time, 40 hours per week. Some (23%) work part-time, 20 hours per week and a few (7%) work on a temporary or on-call basis, 17 hours per week.

**Shifts:** All employers (100%) report having day shifts. Many (38%) also have swing shifts.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$6.00 - 7.50 \$6.75 - 9.00	\$6.75 \$7.00
New Hires, With Experience: Union:	\$6.50 - 13.15 \$7.50 - 12.00	\$11.00 \$8.00
After Three Years With the Firm: Union:	\$9.00 - 15.81 \$9.50 - 14.00	\$12.00 \$10.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 110

Separations to 2004: 100 \*Total Openings: 210

New Job Growth Rate: 15.7%\*. Projected growth is slower than

the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

11 project employment to grow and 5 expect employment to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 222

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# PHYSICAL THERAPISTS

**OES 323080** 

Physical Therapists apply techniques and treatments that help relieve pain, increase the patient's strength and decrease or prevent deformity and crippling.

**Alternate Job Titles:** Registered Physical Therapists

Related DOT Codes: 076.121-014

### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree. A few had completed a graduate study degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with word processing, database and spreadsheet software skills. Physical Therapists are licensed by the State Physical Therapy Examining Committee.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 - 3 years experience as a Licensed Physical Therapist.

# **Skills rated "very important":**

Customer service skills

Interpersonal skills

Observation and evaluation skills

Possession of Physical Therapist license

Ability to observe and record patient progress

Knowledge of anatomy and physiology

Knowledge of nerve, joint and bone diseases

Ability to plan patient treatment program

Ability to supervise aides and assistants

Ability to motivate patients

Ability to lift and move patients

Good physical condition

Knowledge of massage techniques

Documentation and record keeping skills

Keeping current on new treatment technologies

Billing procedures

# OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Clinical Specialist, and Department Supervisor/Manager.

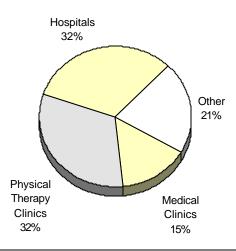
# Nontraditional Occupation: No.

61% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

**Unionization:** None reported

### WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	80%	13%
Dental Insurance:	67%	13%
Vision Insurance:	47%	13%
Life Insurance:	60%	13%
Paid Sick Leave:	67%	7%
Paid Vacation:	80%	7%
Retirement Plan:	80%	7%
Child Care:	7%	

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, public school or program referrals, unsolicited applicants, and industry referrals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: **Physical Therapists** *Experienced* applicants: **Competitive** *Inexperienced* applicants: **Competitive** 

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many Physical Therapists work full-time, 40 hours per week. Some work on a temporary or on call basis, 25 hours per week. A few work part-time, 17 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$13.50 - 24.00	\$19.00
New Hires, With Experience:	\$16.75 - 26.00	\$21.89
After Three Years With the Firm:	\$19.25 - 31.00	\$27.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - less than 1,662

**OES Growth Projections:** New jobs through 2004: 220

<u>Separations to 2004:</u> 70 \*Total Openings: 290

**New Job Growth Rate:** 26.5%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

### **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.

10 expect employment to remain stable, 6 project employment to grow and 1 expects employment to decline over the next three years.

**Education / Training Providers:** See Appendix A, page 223

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

<sup>\*7</sup> year period 1997 through 2004.

### PHYSICIANS' ASSISTANTS

### **OES 325110**

Physicians' Assistants provide patient services under the direct supervision and responsibility of a doctor of medicine or osteopathy. They elicit detailed patient histories and do complete physical examinations, reach tentative diagnosis and order appropriate laboratory tests. This occupation requires certification by the National Commission on Certification of Physicians' Assistants and the California State Board of Medical Quality Assurance. Does not include Nurses, or Ambulance Attendants whose training is limited to the application of first aid.

Alternate Job Titles: None reported.

Related DOT Codes: 079.364-018

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All firms(100%) require a bachelor degree. Many (45%) require completed graduate studies.

**Training:** No firms allow training to substitute for work experience. A few (18%) employers also prefer 2 year interships and applicants with database and word processing software skills. Almost all (82%) firms do not require technical or vocational training. Licensing is by the Physicians Assistant Examining Committee.

**Experience:** All firms (100%) require 2 - 5 years related work experience. Almost all (90%) do not accept other occupational experience. Responding employers report not hiring inexperienced applicants.

### Skills rated "very important":

Ability to interview patients for information

Oral communication skills

Ability to read and follow instructions

Ability to follow oral instructions

Ability to pass Physician Assistant certifying exam

Knowledge of infection control

Ability to work under pressure and handle crisis situations

Record keeping skills

Ability to work independently

Ability to interpret test results

Willingness to work nights, weekends and holidays or be on-call

Basic math skills

Ability to perform comprehensive physical examination

Ability to instruct and counsel patient

Ability to stand for long periods of time

Ability to assist in surgery

Ability to write legibly

Ability to administer diagnostic and laboratory tests

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Medical Doctor (with additional education).

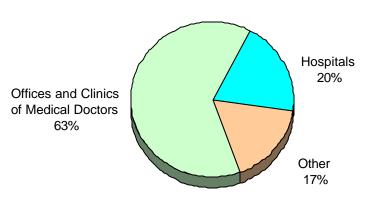
### Nontraditional Occupation: No.

40% of workers in survey responses were female.

**Turnover:** Moderately high, 30% in the past 12 months.

**Unionization:** None reported.

### WHERE THE JOBS ARE



### FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Not Provided
Medical Insurance:	91%	0%
Dental Insurance:	64%	27%
Vision Insurance:	64%	27%
Life Insurance:	73%	18%
Paid Sick Leave:	91%	0%
Paid Vacation:	91%	0%
Retirement Plan:	55%	36%
Child Care:	27%	64%

Other employer specified: 401-K Plan, Education Reimbursement, Profit sharing

### **Three Most Frequently Used Recruitment Methods:**

Trade journals, employee referrals, newspaper advertisements.

Others include: Internet, colleges and universities.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		
Not Difficult		
Few Employers Hire		X

Job Market for: Physicians' Assistants

Experienced applicants: No competition in job search Inexperienced applicants: Very competitive job search

### **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Almost all (85%) Physicians' Assistants work full-time, 42 hours per week. A few (10%) work part-time, 25 hours per week; or on a temporary or on-call basis (5%), 20 hours per week.

**Shifts:** Almost all employers (82%) report having day shifts. Some (27%) also have swing shifts and a few (18%) have employees on call 24 hours a day.

Hourly Wages	Range	Median
New Hires, No Experience:	Not available	Not available
New Hires, With Experience:	\$21.10 - 26.00	\$23.97
After Three Years With the Firm:	\$26.01 - 43.15	\$33.80

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 50

Separations to 2004: 30 \*Total Openings: 80

**New Job Growth Rate:** 17.9%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

# **Employer Responses and Employment Outlook:**

11 employers provided data to develop this profile.

7 project employment to remain stable and 4 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 223

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

<sup>\*7</sup> Year period 1997 through 2004.

# PLUMBERS, PIPEFITTERS AND STEAMFITTERS

#### **OES 875020**

Plumbers, Pipefitters, and Steamfitters assemble, install, alter and repair pipe systems (metal, plastic, ceramic, composition, etc.) that carry water, steam, air, or other liquids or gases. Does not include plumbers and pipefitters who primarily install and repair heating, air conditioning, and refrigeration systems.

Alternate Job Titles: Apprentice Plumbers, Journey Level Plumbers/Pipefitters/Steamfitters, Sprinkler Fitters

**Related DOT Codes:** 862.261-010, 862.381-030, 862.681-010

## **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All firms (100%) require a high school diploma or equivalent.

**Training:** Some firms (33%) require technical or vocational training. Most firms (73%) allow training at a technical school or building trades sponsored program to substitute for work experience.

**Experience:** Some firms (33%) require related work experience. They prefer applicants with 6 - 36 months experience. No firms accept other occupational experience.

# **Skills rated "very important":**

Knowledge of safe working practices and safety gear

Ability to read and follow instructions

Ability to use hand tools and power tools

Ability to lift 50 lbs.

Ability to work on a team

Oral communication skills

Possession of a valid drivers license

Pipefitting skills

Ability to work independently

Ability to stand continuously for 2 or more hours

Ability to work in cramped or uncomfortable positions

Soldering and welding skills

Knowledge of shop mathematics

Possession of mechanical aptitude

Ability to work under pressure and meet deadlines

Completion of apprenticeship training

Ability to read and interpret blueprints

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Pipefitter, Foreman, Supervisor, Planning Supervisor, Quality Control Engineer.

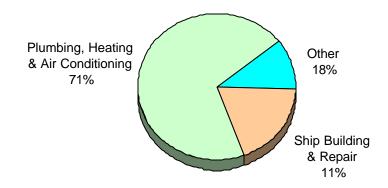
Nontraditional Occupation: Yes.

1% of workers in survey responses were female.

**Turnover:** Very low, 4% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 53% of employees were unionized.

# WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	43%	36%	14%
Dental Insurance:	29%	36%	29%
Vision Insurance:	14%	29%	50%
Life Insurance:	21%	21%	50%
Paid Sick Leave:	29%	7%	59%
Paid Vacation:	57%	7%	36%
Retirement Plan:	36%	21%	36%
Child Care	0%	0%	100%

Other employer specified: 401-K Plan, Profit Sharing

## **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, walk-in applicants.

**Others include:** Referrals from contractors, layoffs from other companies, School-to-Career trainees, union hall referrals, school and program referrals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	Х
Moderately Difficult		
Not Difficult		
Few Employers Hire		

Job Market for: Plumbers, Pipefitters, and Steamfitters Experienced applicants: No competition in job search Inexperienced applicants: No competition in job search

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> All (100%) Plumbers, Pipefitters, and Steamfitters work full-time, 42 hours per week.

**Shifts:** All employers (100%) report having day shifts. Some (20%) also have graveyard shifts and swing shifts (20%).

Hourly Wages <sup>*</sup>	Range <sup>*</sup>	Median *
New Hires, No Experience:	\$7.00 - 9.50	\$9.00
New Hires, With Experience:	\$10.00 - 17.00	\$13.25
After Three Years With the Firm:	\$14.00 - 25.00	\$17.00

<sup>\*</sup>Combined union and non-union wages, some employers may also pay commissions.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 900
Separations to 2004: 660

<u>Separations to 2004:</u> \*Total Openings: 660
1,560

**New Job Growth Rate:** 22.7%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
10 project employment to grow and 5 expect employment to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 223

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

## PROBATION and PAROLE OFFICERS

#### **Sub Part of DOT 195.107-046**

Probation and Parole Officers counsel juvenile or adult offenders in activities related to legal conditions of probation or parole. Confer with offender, legal representatives, family and other concerned persons. Review legal documents of offender to conduct prehearing or presentencing investigations and rehabilitation plan. They compile reports, testify in court and make recommendations concerning conditional release or institutionalization of offenders. Informs offender or guardian of legal requirements of conditional release. They may counsel offender and family or guardian and may help offender secure education and employment. Refer offender to community resources for rehabilitation assistance. Evaluate offender's progress on follow-up visits to home, school and worksite.

Alternate Job Titles: Correctional Deputy Probation Officer

Related DOT Codes: None

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have an associate degree. Some have a bachelor degree.

**Training:** All reporting employers sometimes allow training to substitute for work experience. Employers prefer applicants with word processing software skills.

**Experience:** Many firms usually require related work experience. Employers prefer applicants with 2 years experience as a Correctional Counselor / Officer or Probation Officer.

# **Skills rated "very important":**

Ability to read legal documents and enforce court orders

Ability to evaluate offender progress

Willingness to be on call 24 hours a day

Ability to plan ahead and meet deadlines

Customer service and interpersonal skills

Pass a physical abilities test

Ability to work independently

Oral communication skills

Ability to read and follow instructions

Ability to conduct investigations

Ability to interview others for information

Ability to give testimony in court

Knowledge of court procedures

Ability to write detailed reports

Knowledge of local social service agencies

Ability to give counsel to offender or family members

Age 21 and have California drivers license

Computer skills

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Senior Probation Officer, Probation Supervisor.

**Nontraditional Occupation:** No.

45% of workers in survey responses were female.

**Turnover:** Very low, 3% in the past 12 months.

<u>Unionization:</u> Yes.100% of employers and 100% of employees surveyed.

#### WHERE THE JOBS ARE

County Government State Government Federal Government

	Full-Time
Medical Insurance:	100%
Dental Insurance:	50%
Vision Insurance:	50%
Life Insurance:	0%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	100%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, employee referrals, Employment Development Department, newspaper advertisements, unsolicited applicants.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Probation and Parole Officers** 

Experienced applicants: Competitive

Inexperienced applicants: Somewhat Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All Probation and Parole Officers work full-time, 40 hours per week.

Hourly Wages - Union	Range	Median
New Hires, No Experience:	\$12.00 - 16.00	\$14.00
New Hires, With Experience:	\$17.25 - 17.50	\$17.25
After Three Years With the Firm:	\$19.25 - 21.25	\$20.25

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323
OES Growth Projections: New jobs through 2004: 450
Separations to 2004: 290

740

Openings for Probation and Parole Officers are included in the general classification of Social Workers - - except medical and psychiatric.

**New Job Growth Rate:** 13.2%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> All responding employers project employment to grow over the next three years.

**Employer Responses:** 2 employers supplied data used in this analysis.

**Education / Training Providers :** See Appendix A, page 223

#### **Key Terms:**

## **PUBLIC RELATIONS MANAGERS**

# Sub part of OES 130110

Public Relations Managers plan, organize and direct public relations activities to create and maintain a favorable public image of an organization through development and communication of information designed to keep the public informed of employer's programs, accomplishments, or point of view. They prepare and distribute fact sheets, news releases, photographs, scripts, motion picture or tape recordings to media representatives and other persons interested in learning about or publicizing an employer's activities or message. They purchase advertising space and time, conduct public contact programs, promote good will through such publicity efforts as: public speeches, exhibits, films, tours and question / answer sessions. They may represent employer at public, social and business gatherings. They may direct the activities of subordinates.

Alternate Job Titles: Account Executive, Public Relations Specialist

**Related DOT Codes:** 163.117-022, 164.117-010, 164.167-010, 165.167-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a bachelor degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years training as a journalist or experience from a public relations internship and having word processing, database, spreadsheet, desktop publishing and internet software skills.

**Experience:** Many firms sometimes require related work experience. They prefer applicants with 1 - 2 years experience as an Account Executive or Public Relations Assistant.

# Skills rated "very important":

Effective writing skills

Ability to read and follow instructions

Ability to maintain good customer relations

Oral communication skills

Ability to meet deadlines

Public speaking skills

Ability to supervise or manage multiple priorities

Ability to handle unexpected situations

Ability to develop and implement company marketing plan

Ability to direct promotion of special events

Customer service skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Account Executive, Supervisor.

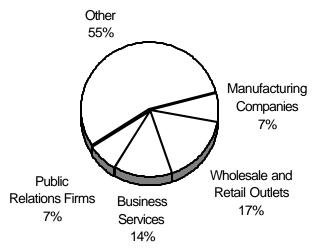
Nontraditional Occupation: No.

57% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

**Unionization:** No.

# WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	62%
Vision Insurance:	46%
Life Insurance:	54%
Paid Sick Leave:	77%
Paid Vacation:	85%
Retirement Plan:	38%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, in-house promotion or transfer, unsolicited applicants, professional organizations, job hotlines

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Public Relations Managers** *Experienced* applicants: **Competitive** 

*Inexperienced* applicants: **Somewhat competitive** 

#### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Public Relations Managers work full-time, 43 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.00 - 14.50	\$9.75
New Hires, With Experience:	\$9.00 - 20.50	\$13.25
After Three Years With the Firm:	\$13.75 - 24.00	\$18.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

New jobs through 2004: 1,360

Separations to 2004: 630

\*Total Openings: 1,990

Openings for Public Relations Managers are included in the general classification of Marketing, Advertising and Public Relations Managers.

**New Job Growth Rate:** 30.5%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

**Employer Outlook on Employment :** Many responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 224

#### **Key Terms:**

#### PUBLIC RELATIONS SPECIALISTS AND PUBLICITY WRITERS

OES 340080

Public Relations Specialists and Publicity Writers include workers concerned with promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communication media, they also prepare and arrange displays, making speeches, and performing related publicity efforts.

<u>Alternate Job Titles:</u> Account Executive, Public Relations Coordinator, Special Events Publicists, Publications Writer, Account Supervisor, Business Development Specialist, Account Coordinator, Public Affairs Specialist, Client Executive, Public Relations Associate, Publicists

Related DOT Codes: 165.167-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (91%) require a bachelor degree. A few (9%) require an associate degree.

**Training:** Many firms (47%) allow training to substitute for work experience. Some firms (27%) require technical or vocational training. Employers prefer applicants with word processing, spreadsheet, database and desktop publishing computer software skills.

**Experience:** Almost all firms (82%) require 1 - 3 years prior work experience. Many firms (42%) accept other occupational experience such as 1 - 3 years experience in marketing, journalism, communications or as a news reporter.

### Skills rated "very important":

English grammar and spelling skills

Ability to meet deadlines

Oral communication skills

Ability to pay attention to detail

Ability to express thoughts clearly and simply

Ability to work under pressure

Ability to write news articles, press releases and fact sheets

Ability to work independently

Ability to read and follow instructions

Ability to work as a team

Ability to build positive relationships with community organizations

Ability to coordinate production of advertisements or promotions

Knowledge of local and/or national media representatives

Ability to write legibly

Willingness to work long hours

Research skills

Public speaking ability

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Assistant/Senior Account Executive, Account Manager, Account Executive Supervisor, Public Relations Coordinator, Assistant/Associate Director.

#### Nontraditional Occupation: No.

62% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

**Unionization:** None reported.

# WHERE THE JOBS ARE

Industry

Advertising Agencies

Colleges and Universities

Consulting Services

Financial Institutions

Hospitals and Clinics

Hospitality Industry

Local and Federal Government

Public Relations Firms

Religious, Civic and Social Organizations

Research Organizations

## FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	68%	14%	18%
Dental Insurance:	36%	9%	55%
Vision Insurance:	32%	5%	64%
Life Insurance:	45%	5%	50%
Paid Sick Leave:	82%	5%	14%
Paid Vacation:	86%	5%	9%
Retirement Plan:	50%	9%	41%
Child Care	5%	5%	91%

Other employer specified: 401-K Plan, Paid Parking, Cell Phone, Profit Sharing, Education Reimbursement

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, internet.

**Others include:** Colleges and universities, networking, internships, trade journals, job line, career fairs.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		Х
Few Employers Hire		

Job Market for: Public Relations Specialists

Experienced applicants: Little competition in job search Inexperienced applicants: Very competitive job search

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (90%) Public Relations Specialists workfull-time, 42 hours per week. A few (10%) work part-time, 19 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.63 - 11.51	\$10.00
New Hires, With Experience:	\$9.59 - 15.34	\$12.55
After Three Years With the Firm:	\$11.77 - 20.00	\$16.35

## OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 150

<u>Separations to 2004:</u> \*Total Openings: 200

New Job Growth Rate: 21.1%\*. Projected growth is about the

same as the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

22 employers provided data to develop this profile.

12 project employment to grow and 10 expect employment to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 224

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **REGISTERED NURSES**

### **OES 325020**

Registered Nurses administer nursing care to ill or injured persons. This group includes administrative, public health, industrial, private duty and surgical nurses. Licensing or registration is required. Does not include Nursing Instructors and Teachers.

Alternate Job Titles: Clinical Nurse

Related DOT Codes: 075.124-010, 075.264-010, 075.364-010, 075.371-010,

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have an associate degree; some have a bachelor degree.

**Training:** Many firms sometimes allow training to substitute for work experience. They prefer applicants with 2 - 4 years training, a CPR Certificate and a license from the State Board of Registered Nursing.

**Experience:** Most firms always require related work experience. They prefer to hire applicants with 2 - 3 years prior nursing experience.

## Skills rated "very important":

Ability to handle crisis situations

Ability to work under pressure

Problem solving skills

Ability to read and follow instructions

Ability to take vital signs

Ability to provide personal services to patients

Documentation and record keeping skills

Ability to work on a team

Record keeping skills

Ability to move patients

Willingness to work nights, weekends and irregular hours

CPR and IV skills

Knowledge of infection control (asepsis)

Critical care and trauma skills

Knowledge of operating room technology

Ability to deal with pain and suffering

Basic computer skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Nurse Supervisor, Unit Director. Director of Nursing.

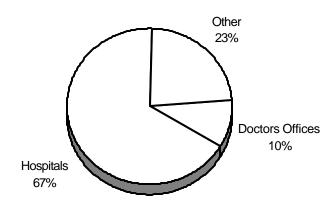
Nontraditional Occupation: No.

83% of workers in survey responses were female.

**Turnover:** Very low, 4% in the past 12 months.

<u>Unionization:</u> Yes. 13% of employers and 40% of employees surveyed.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	93%
Vision Insurance:	79%
Life Insurance:	86%
Paid Sick Leave:	93%
Paid Vacation:	86%
Retirement Plan:	79%
Child Care:	7%

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, unsolicited applicants, employee referrals, in-house promotion or transfer, nurses registry, web site.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Registered Nurses

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Registered Nurses work full-time, 40 hours per week. Some work on a on-call basis, 21 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience: Union	\$10.00 - 18.00 \$15.00 - 16.00	\$15.50 \$15.50
New Hires, With Experience: Union	\$13.00 - 22.00 \$16.75 - 17.00	\$16.00 \$17.00
After Three Years With the Firm: Union	\$16.00 - 32.00 \$18.50 - 19.75	\$20.00 \$19.25

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment:
OES Growth Projections:

Very large - 7,202 and above
New jobs through 2004: 1,870
Separations to 2004: 1,510
\*Total Openings: 3,380

New Job Growth Rate: 12.0%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Many responding employers project employment to remain stable and some expect to grow over the next three years because of the addition of new facilities.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 224

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

ROOFERS OES 878080

Roofers perform duties concerned with covering roofs of structures with slate, asphalt, aluminum, wood, and related materials using brushes, knives, punches, hammers and others tools. They may spray roofs, sidings and walls with material to bind, seal, insulate or soundproof sections of structures.

Alternate Job Titles: Journey Level Roofers, Shinglers, Tilemen, Kettlemen, Hot Crewmen, Repairmen

Related DOT Codes: 866.381-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms require either a high school diploma or equivalent (56%) or less than a high school education (44%).

**Training:** Some firms (36%) allow training to substitute for work experience.

**Experience:** Many firms (50%) do not require, but prefer applicants with related work experience or completed apprentiseship programs.

# **Skills rated "very important":**

Ability to work from ladders and scaffolds (good balance)

Ability to work in extreme weather conditions

Ability to do heavy lifting and strenuous work

Knowledge of roofing materials

Oral communication skills

Ability to work under pressure

Ability to plan and supervise work of others

Ability to work independently

Knowledge of waterproofing foundation walls and floors

Familiar with applying asphalt, tar or gravel to roofs

Knowledge of first aid and CPR

Minor carpentry skills

Knowledge of safe working procedures

Ability to use small hand tools

Ability to provide own hand tools and transportation

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Foreman, Supervisor, Crew Chief, Estimator, Sales Representative.

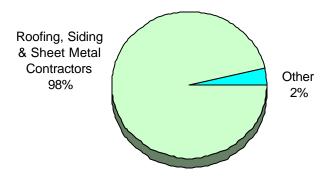
## Nontraditional Occupation: Yes.

6% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

**Unionization:** Yes. 6% of employers and 16% of employees were unionized.

# WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	33%	27%	27%
Dental Insurance:	7%	7%	73%
Vision Insurance:	7%	0%	80%
Life Insurance:	7%	0%	80%
Paid Sick Leave:	13%	0%	73%
Paid Vacation:	33%	0%	53%
Retirement Plan:	0%	7%	80%
Child Care	0%	0%	87%

<sup>\*</sup>The percentage is based on the number of employers responding to this question

#### **Three Most Frequently Used Recruitment Methods:**

Walk-in applicants, employee referrals, newspaper advertisements.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		Х
Few Employers Hire		

Job Market for: Roofers

Experienced applicants: Little competition in job search Inexperienced applicants: Very competitive job search

## **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Many (58%) Roofers work full-time, 38 hours per week. Some (30%) work part-time, 25 hours per week. A few work on a temporary or on-call basis (7%), 25 hours per week or on a seasonal basis (5%) 34 hours per week.

Shifts: All employers (100%) report having day shifts.

Hourly Wages <sup>*</sup>	Range <sup>*</sup>	Median*
New Hires, No Experience:	\$5.75 - 9.00	\$7.50
New Hires, With Experience:	\$6.50 - 17.00	\$10.00
After Three Years With the Firm:	\$8.00 - 20.00	\$14.50

<sup>\*</sup>Combined union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 380

<u>Separations to 2004:</u> 300 \*Total Openings: 680

New Job Growth Rate: 29.7%\*. Projected growth is much faster

than the county-wide average of 17.7%\*.

#### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
10 project employment to grow and 6 expect employment

to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 225

#### **Key Terms:**

<sup>\*7</sup> Year period 1997 through 2004.

# SALES REPRESENTATIVES, EXCEPT SCIENTIFIC AND RELATED PRODUCTS AND SERVICES AND RETAIL

OES 490080

Sales Representatives, Except Scientific and Related Products and Services, sell goods and services for wholesalers or manufacturers to businesses or groups of individuals. This work requires a substantial knowledge of the items sold. Sales representatives solicit orders from established clients or secure new customers.

<u>Alternate Job Titles:</u> Sales Specialist, Field Sales Engineer, Area Sales Representive, Contract Sales Director, Outside Sales Representatives, Account Executive, Account Manager, Major Systems Representative, Customer Service Representative, Sales Manager

Related DOT Codes: 260.357-014, 274.357-034, 275.357-034, 277.357-026, 279.357-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (61%) require a high school diploma or equivalent. Some (28%) require a bachelor degree and a few (11%) require an associate degree.

**Training:** Some firms (39%) allow training to substitute for work experience. Few firms (6%) require technical or vocational training. Employers prefer applicants with word processing, spreadsheet and database computer software skills.

**Experience:** Most firms (61%) require 6 -36 months related work experience. Most firms (61%) accept other occupational experience such as 6 - 24 months in retail/wholesale sales or customer service.

## Skills rated "very important":

Oral communication skills

Interpersonal and customer service skills

Knowledge of company products

Ability to work under pressure

Organizational skills

Willingness to work on a commission basis

Willingness to work long hours

Ability to work independently

Ability to develop sales leads and new accounts

Ability to provide own transportation

Negotiation skills

Ability to display or demonstrate product

Business math skills

Record keeping skills

Positive attitude

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Sales Manager, District Sales Manager, Regional Sales Manager, Customer Service Representative, Account Manager.

#### Nontraditional Occupation: No.

34% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

**Unionization:** None reported.

# WHERE THE JOBS ARE

Industry

**Building Materials** 

**Business Services** 

Clothing Manufacturers

Computers, Software and Office Equipment

Electronic Parts and Equipment

**Groceries and Related Products** 

Help Supply Services

Industrial Machinery

Medical and Hospital Supplies and Equipment

Motor Vehicle Supplies and Parts

**Pharmaceuticals** 

Sporting and Athletic Goods

## FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	56%	44%	0%
Dental Insurance:	50%	44%	6%
Vision Insurance:	39%	44%	17%
Life Insurance:	56%	28%	17%
Paid Sick Leave:	65%	33%	0%
Paid Vacation:	67%	33%	0%
Retirement Plan:	50%	33%	17%
Child Care	0%	6%	94%

Other employer specified: 401-K Plan, Company Car, Paid Holidays, Disability Insurance, Expense Account, Stock Purchase Plan, Employee Assistance Program

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer.

Others includes: Internet, customer referrals, trade journals, job fairs.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	Х
Not Difficult		
Few Employers Hire		

Job Market for: Sales Representatives

Experienced applicants: Little competition in job search Inexperienced applicants: Little competition in job search

#### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (82%) Sales Representatives work full-time, 43 hours per week. A few work part-time (14%), 34 hours per week or on a temporary or on-call basis (4%), 25 hours per week.

**Shifts:** All employers (100%) report having day shifts. A few also have swing shifts.

Hourly Wages	Range	Median
New Hires, No Experience: With commissions & bonus	\$9.00 - 16.06 \$9.54 - 17.84	\$10.36 \$12.10
New Hires, With Experience: With commissions & bonus	\$6.44 - 21.31 \$9.68 - 29.44	\$13.04 \$17.19
After Three Years With the Firm: With commissions & bonus	\$7.36 - 19.61 \$13.86 - 42.61	\$14.20 \$25.13

# OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Very large - More than 7,202 **OES Growth Projections:** New jobs through 2004: 1,120

<u>Separations to 2004:</u> 1,250 \*Total Openings: 2,370

New Job Growth Rate: 15.9%\*. Projected growth is about the same

as the county-wide average of 17.7%\*. \*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.

11 project employment to grow and 7 expect employment

to remain stable over the next two years.

**Education / Training Providers:** See Appendix A, page 225

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# SECRETARIES - EXCEPT LEGAL AND MEDICAL

# **OES 551080**

Secretaries, except Legal and Medical, relieve officials of clerical work and minor administrative and business detail by scheduling appointments, giving information to callers, taking dictation, composing and typing routine correspondence, reading and routing incoming mail, and filing correspondence and other records. They may perform various other assigned clerical duties. Does not include Medical and Legal Secretaries.

Alternate Job Titles: Secretary/Receptionists, Administrative Assistants, Executive Assistants

**Related DOT Codes: 201.362-022, 201.362-030** 

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have some college (but not necessarily a degree). A few have a high school diploma or equivalent.

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 year secretarial training and a typing certificate who have word processing, spreadsheet, database, desktop publishing and Internet software skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 6 months - 2 years prior experience as a Receptionist, Administrative Clerk or Administrative Assistant.

# **Skills rated "very important":**

Oral communication skills

Ability to read and follow instructions

Telephone answering skills

Ability to use word processing software

Ability to work independently

Interpersonal skills

English grammar, spelling, and punctuation skills

Ability to write effectively

Record keeping skills

Well groomed

Ability to maintain an appointment calendar

Ability to work under pressure

Alphabetic and numeric filing skills

Ability to write legibly

Ability to type at least 60 wpm

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Human Resource Assistant, Administrative Secretary, and Office Supervisor/Manager.

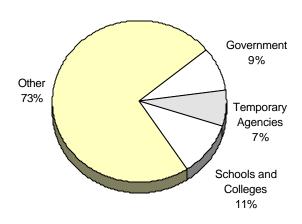
**Nontraditional Occupation:** No.

88% of workers in survey responses were female.

**Turnover:** Moderate low, 20% in the past 12 months.

Unionization: None reported

# WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	81%
Vision Insurance:	38%
Life Insurance:	88%
Paid Sick Leave:	88%
Paid Vacation:	100%
Retirement Plan:	75%
Child Care:	6%
Other: 401-K Plan. 12	25 Cafeteria Plan

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, private employment agency, in-house promotion or transfer, Employment Development Department, San Diego Career Center Network, and Community Based Organizations.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	X
A Little Difficult		
Not Difficult		

Job Market for: Secretaries

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Almost all Secretaries work full-time, 40 hours per week. For flexible working options, many secretaries work on a temporary or on call basis, 40 hours per week in employment opportunities through temporary employment agencies.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 10.50	\$9.35
New Hires, With Experience:	\$7.00 - 13.25	\$11.50
After Three Years With the Firm:	\$9.00 - 17.25	\$14.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above

OES Growth Projections: New jobs through 2004: 900

Separations to 2004: 2,220

\*Total Openings: 3,120

**New Job Growth Rate:** 4.9%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

9 expect employment to remain stable and 7 project employment to grow over the next three years.

Education / Training Providers: See Appendix A, page 213

#### **Key Terms:**

# SECRETARIES, LEGAL

### **OES 551020**

Legal Secretaries prepare legal papers and correspondence of a legal nature, such as summonses, complaints, motions and subpoenas.

They must be familiar with legal terminology, procedures and documents, as well as legal research and may review law journals and other legal publications to identify court decisions pertinent to pending cases and submit articles to company officials.

Alternate Job Titles: None

Related DOT Codes: 201.362-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have some college (but not necessarily a degree) or an associate degree.

**Training:** Many firms never allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years legal secretarial training including word processing software skills.

**Experience:** Most firms usually require related work experience. They prefer applicants with 1 - 2 years prior legal secretary experience.

# Skills rated "very important":

Ability to type 60 words per minute

Ability to use word processing software

Ability to work under pressure and meet deadlines

Ability to read and follow instructions

Oral communication skills

Telephone answering skills

Ability to follow law office procedures

Ability to maintain an appointment calendar

Interpersonal skills

Ability to operate a transcribing machine

Public contact and customer service skills

Ability to write legibly

Organizational skills

Flexibility

Internet or on-line research skills

## **OCCUPATIONAL CHARACTERISTICS**

**Career Ladders:** Promote to: Paralegal with education.

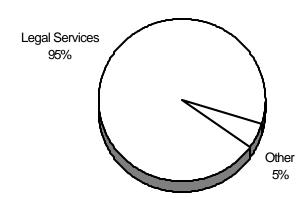
## **Nontraditional Occupation:** No.

97% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

<u>Unionization:</u> Yes. 6% of employers surveyed and 3% of employees.

### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	89%
Dental Insurance:	72%
Vision Insurance:	44%
Life Insurance:	61%
Paid Sick Leave:	89%
Paid Vacation:	94%
Retirement Plan:	56%

Other: 401-K Plan

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, in-house promotion or transfer, unsolicited applicants, employment agencies, trade publications or legal newspapers.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	X	
Not Difficult		

Job Market for: **Legal Secretaries** *Experienced* applicants: **Competitive** 

*Inexperienced* applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Legal Secretaries work full-time, 38 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$7.00 - 17.25	\$13.25
New Hires, With Experience:	\$9.00 - 21.75	\$14.75
After Three Years With the Firm:	\$14.00 - 24.25	\$17.25

<sup>\*</sup>Includes union and non-union wages.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 90

Separations to 2004: 220

\*Total Openings: 310

**New Job Growth Rate:** 5.0%\*. Projected growth is slower than the county-wide average of 17.7%\*.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 18 employers supplied data used in this analysis.

**Education / Training Providers :** See Appendix A, page 216

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

<sup>\*7</sup> year period 1997 through 2004.

# SECRETARIES, MEDICAL

# **OES 551050**

Medical Secretaries perform secretarial duties utilizing specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Their duties include taking dictation, and compiling and recording medical charts, reports, and correspondence, as well as preparing and sending bills to patients or recording appointments.

Alternate Job Titles: Medical Front Office Assistants, Medical Administrative Assistants, Medical Receptionists, Front Office Staffer

Related DOT Codes: 201.362-014

#### EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have a high school diploma or equivalent and a few have some college (but not necessarily a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 6 - 12 months medical office training with a certificate and have word processing software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 year experience as a General Secretary, Front Office Staffer or Medical Intern.

# **Skills rated "very important":**

Ability to work as part of a team

Interpersonal skills

Oral communication skills and telephone answering skills

Ability to work independently

Ability to maintain an appointment calendar

Ability to read and follow instructions

Ability to write legibly

Ability to complete and explain medical insurance forms

Alphabetic and numeric filing skills

Good spelling, punctuation and grammar

Ability to use a personal computer

Ability to maintain medical records and charts

Ability to operate office equipment

Ability to follow billing procedures

Neat clean appearance

Willingness to work flexible hours

Knowledge of health insurance plans

# OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Insurance Biller, Medical Assistant with training, and Office Supervisor/Manager.

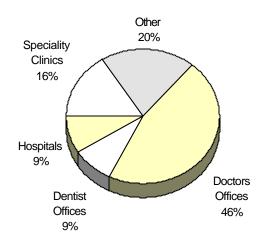
**Nontraditional Occupation:** No.

93% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

Unionization: None reported

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	87%
Dental Insurance:	67%
Vision Insurance:	13%
Life Insurance:	13%
Paid Sick Leave:	40%
Paid Vacation:	87%
Retirement Plan:	47%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, public school or program referrals, private employment agencies, San Diego Career Center Network, and office interns.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	Х	
Not Difficult		

Job Market for: **Medical Secretaries** *Experienced* applicants: **Competitive** 

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Most Medical Secretaries work full-time, 40 hours per week. A few work on a temporary or on-call basis, 39 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 10.00	\$7.91
New Hires, With Experience:	\$7.25 - 11.50	\$9.00
After Three Years With the Firm:	\$8.50 - 14.00	\$11.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 130

Separations to 2004: 150

\*Total Openings: 280

**New Job Growth Rate:** 10.8%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile. 9 expect employment to remain stable and 6 project employment to grow over the next three years.

**Education / Training Providers:** See Appendix A, page 225

#### **Key Terms:**

# **SEWING MACHINE OPERATORS (GARMENT)**

OES 927170

Sewing Machine Operators (garment) operate or tend sewing machines to perform garment sewing operations, such as joining, reinforcing, or decorating garments or garment parts. This includes sewing machine operators and tenders who perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.

Alternate Job Titles: Sewing Operators, Knitting Operators, Quality Control Sewers, Seamstress

**Related DOT Codes:** 787.682-046, 787.682-050, 787.682-074

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have less than a high school education. A few have a high school diploma.

**Training:** Many firms sometimes allow training to substitute for work experience. Some employers provide on-the-job training or require applicants to pass a sewing test.

**Experience:** Many firms always require related work experience. They prefer applicants with 3 -12 months experience as a Quality Control Sewer or Garment Sewer.

# **Skills rated "very important":**

Ability to pay attention to detail

Ability to follow safe equipment operating practices

Ability to sit continuously for 2 or more hours

Ability to work independently

Ability to read and follow instructions

Ability to operate industrial sewing machines

Willingness to work with close supervision

Ability to meet deadlines

Ability to work in a noisy environment

Knowledge of garment construction

Ability to work under pressure

Willingness to work nights, weekends and holidays

Ability to operate fabric cutting machines

Keeping current on new sewing technologies

Basic computer skills

#### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Sewer, Sewing Inspector, Crew Manager, and Floor Supervisor/Manager.

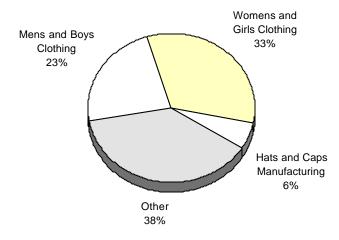
**Nontraditional Occupation:** No.

73% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

<u>Unionization:</u> Yes. 7% of employers and 40% of employees were unionized.

### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	80%
Vision Insurance:	100%
Life Insurance:	100%
Paid Sick Leave:	60%
Paid Vacation:	80%
Retirement Plan:	100%
Other: 401-K Plan,	Disability Insurance

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Employment Development Department, unsolicited applicants, newspaper advertisements, employee referrals, and "Help Wanted" sign postings.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	.,	.,
Not Difficult	Х	X

Job Market for: Sewing Machine Operators

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Sewing Machine Operators work full-time, 40 hours per week. A few work part-time, 20 hours per week.

Hourly Wages	Range*	Median <sup>*</sup>
New Hires, No Experience:	\$5.75 - 6.00	\$5.75
New Hires, With Experience:	\$5.75 - 7.75	\$6.50
After Three Years With the Firm:	\$5.75 - 9.75	\$7.50

<sup>\*</sup>Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: -10

Separations to 2004: 210

\*Total Openings: 220

**New Job Growth Rate:** -0.5%\*. Projected growth is declining slowly as compared to the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.

9 project employment to grow, 4 expect employment to remain stable and 2 expect employment to decline over the next three years.

**Education / Training Providers:** No formal education or training programs for this occupation.

#### **Kev Terms:**

### SHEET METAL WORKERS

## **OES 891320**

Sheet Metal Workers fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Their work may involve setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using a hammer; operating soldering and welding equipment to join sheet metal parts; and inspecting, assembling, and smoothing seams and joints of burred surfaces.

<u>Alternate Job Titles:</u> Sheet Metal Installer, Layout Installer Mechanics, Shear Break Operators, CNC Machine Operators, Sheet Metal Welders, Deburrers, Grinders, Sheet Metal Fabricators, Ship Carpenters

**Related DOT Codes:** 703.684-010, 730.684-074, 804.281-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (61%) require less than a high school education. Some (39%) require a high school diploma or equivalent.

**Training:** Some firms (31%) allow training to substitute for work experience. Few firms (11%) require technical or vocational training. A few provide 3 months on-the-job training.

**Experience:** Most firms (61%) do not require related work experience, but prefer 12 - 36 months prior related work experience. Few firms (7%) accept other occupational experience.

## **Skills rated "very important":**

Ability to pay attention to detail

Knowledge of safe working practices and safety gear

Ability to work under pressure and meet deadlines

Good hand-eye coordination

Ability to work independently

Ability to stand continuously for 2 or more hours

Ability to use hand tools and power tools

Ability to use scribers, dividers, squares and rulers

Ability to work on a team

Ability to use shears, breaks, presses, forming rolls and routers

Knowledge of shop mathematics

Ability to read and interpret blueprints or sketches

Knowledge of machining and layout techniques

Ability to use calipers, scales, micrometers

Oral communication skills

Knowledge of metallic materials (iron, copper, steel, aluminum)

# **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead, Journeyman, Supervisor, Shop Foreman, Office Manager, General Manager.

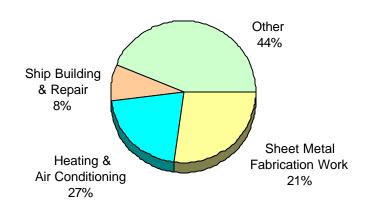
Nontraditional Occupation: Yes.

2% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

<u>Unionization:</u> Yes. 11% of employers and 22% of employees were unionized.

## WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

#### **Full Time Employees**

	<u>E'er Pays Al</u> l	<b>Shared Cost</b>	Not Provided
Medical Insurance:	44%	39%	11%
Dental Insurance:	33%	39%	22%
Vision Insurance:	22%	17%	56%
Life Insurance:	17%	22%	56%
Paid Sick Leave:	22%	0%	72%
Paid Vacation:	78%	0%	17%
Retirement Plan:	33%	11%	50%
Child Care	0%	0%	94%

Other employer specified: 401-K Plan

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, Employment Development Departament.

Others include: Walk-in applicants

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	Х
Moderately Difficult		
Not Difficult		
Few Employers Hire		

Job Market for: Sheet Metal Workers

Experienced applicants: No competition in job search Inexperienced applicants: No competition in job search

### **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (85%) Sheet Metal Workers work full-time, 41 hours per week. A few (14%) work part-time, 12 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages*	Range*	Median*
New Hires, No Experience:	\$5.75 - 10.00	\$7.00
New Hires, With Experience:	\$7.00 - 13.00	\$10.13
After Three Years With the Firm:	\$10.00 - 18.00	\$14.50

<sup>\*</sup>Combined union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 70

Separations to 2004: 240

\*Total Openings: 310

**New Job Growth Rate:** 4.3%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

## **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.
16 project employment to remain stable and 2 expect employment

to grow over the next two years.

Education / Training Providers: See Appendix A, page 226

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# SHERIFFS AND DEPUTY SHERIFFS

OES 630320

Sheriffs and Deputy Sheriffs enforce law and order in rural or unincorporated districts or serve legal processes of courts. They may patrol court-house, guard court or grand jury, or escort defendants. This category does not include Deputy Sheriffs who spend the majority of time guarding prisoners in county correctional institutions.

Alternate Job Titles: None reported

**Related DOT Codes:** 377.263-010, 377.363-010, 377.677-014

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have some college (but not necessarily a degree).

<u>Training:</u> Employer always allows training to substitute for work experience. Employer prefers applicants with word processing, database and Internet software skills.

**Experience:** Employer never requires related work experience.

## Skills rated "very important":

Ability to work under pressure and handle crisis situations Willingness to work nights, weekends and holidays Oral communication skills
Ability to work independently
Ability to read and follow instructions
Public contact skills

#### Pre-employment criteria

Must pass psychological interview
Must pass physical performance test
Must pass oral and/or written exam
Age 21 and U.S. citizen
No criminal record
No drug use history

## OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Sergeant

Nontraditional Occupation: No.

33% of workers in survey responses were female.

**Turnover:** Very low, 2% in the past 12 months.

**Unionization:** Deputy Sheriffs Association

## WHERE THE JOBS ARE:

County of San Diego

	Full-Time
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	100%
Life Insurance:	100%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	100%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, and unsolicited applicants.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	Х	
A Little Difficult		
Not Difficult		Х

Job Market for: **Sheriffs and Deputy Sheriffs** *Experienced* applicants: **Somewhat competitive** *Inexperienced* applicants: **Very competitive** 

## **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All Sheriffs and Deputy Sheriffs work full-time, 43 hours per week.

<b>Hourly Wages</b>	Range	Median
New Hires, No Experience:	\$13.00	
New Hires, With Experience:	\$18.50	
After Three Years With the Firm:	\$20.50	

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Range Less than 1,662
OES Growth Projections: New jobs through 2004: 110
Separations to 2004: 130
\*Total Openings: 280

**New Job Growth Rate:** 10.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

1 employer provided data to develop this profile, and projects employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 226

#### **Key Terms:**

# **STATIONARY ENGINEERS (Power Plant Operators)**

**OES 950320** 

Stationary Engineers operate and maintain stationary engines and mechanical equipment to provide utilities for buildings or industrial processes. They operate equipment such as steam engines, generators, motors, turbines and steam boilers.

Alternate Job Titles: Systems Operators, Auxiliary / Assistant Control Operators, Utility / Maintenance Engineers

Related DOT Codes: 950.131-030, 950.382-026, 950.382-030

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have some college (but not necessarily a degree).

**Training:** Most firms never allow training to substitute for work experience.

Some employers require applicants with HVAC Certification.

**Experience:** Almost all firms always require related work experience.

They prefer applicants with 3 - 5 years experience as a HVAC Engineer / Technician, Electrician or Plumber.

# **Skills rated "very important":**

Knowledge of safe plant operating procedures

Ability to detect malfunctioning equipment

Ability to read and follow instructions

Ability to record and keep accurate records

Ability to work independently

Possession of a mechanical aptitude

Ability to use hand tools

Ability to make minor repairs and adjustments

Willingness to work nights, weekends and holidays

Good vision

Ability to lift 50 lbs.

Oral communication skills

Ability to read meters and gauges

Knowledge of heating and air conditioning systems

Ability to kneel, crawl, stoop, bend and climb

Minor plumbing skills

Clean police record - drug free workplace

### **OCCUPATIONAL CHARACTERISTICS**

**Career Ladders:** Promote to: Senior / Chief

Engineer or Supervisor.

**Nontraditional Occupation:** Yes.

1% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

Unionization: Yes. 42% of employers and

75% of employees surveyed.

#### WHERE THE JOBS ARE

Colleges and Universities

High Rise Buildings

Hospitals

Hotels

Recreational Theme Parks

	Full-Time
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	83%
Life Insurance:	83%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	92%
Other: 401-K Plan, Union	n Paid Benefits

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

In-house promotion or transfer, employee referrals, newspaper advertisements, unsolicited applicants, Cable TV, Internet / Website.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Stationary Engineers (Power Plant Operators)

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Stationary Engineers work full-time, 41 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$8.25 - 13.00 \$9.50 - 16.00	\$10.00 \$14.00
New Hires, With Experience: Union:	\$9.75 - 15.00 \$12.00 - 17.00	\$12.00 \$16.00
After Three Years With the Firm: Union:	\$11.50 - 17.50 \$15.50 - 24.00	\$16.00 \$20.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

\*Total Openings:

Size of 1999 Employment: Small - Less than 1,662
OES Growth Projections: New jobs through 2004: 0
Separations to 2004: 30

**New Job Growth Rate:** 0%\*. No significant change in growth. \*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 12 employers supplied data used in this analysis.

**Education / Training:** No formal education or training programs for this occupation.

#### **Key Terms:**

All (100%) Almost A I (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)

30

# STOCK CLERKS - SALES FLOOR

#### **OES 490210**

Sales Floor Stock Clerks receive, store and issue merchandise on the sales floor; stock shelves, racks, cases, bins and tables with merchandise; arrange displays of items to attract customers and may periodically take physical count of stock or check and mark merchandise.

Alternate Job Titles: Stock Crew Clerks, Replenishment Clerks

Related DOT Codes: 299.367-014, 299.677-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a high school diploma or equivalent. A few have some college (but not necessarily a degree).

<u>Training:</u> Most firms usually allow training to substitute for work experience and provide 1 - 3 months of on-the-job training.

**Experience:** Many firms never require related work experience. A few prefer applicants with 6 months previous experience as shipping and receiving clerks or cashiers.

## Skills rated "very important":

Ability to read and follow instructions Ability to stand for long periods of time Customer service skills Ability to stock shelves

Oral communication skills

Ability to work independently

Ability to lift 50 lbs.

Ability to write legibly

Basic math skills

Ability to work under pressure

Willingness to work with close supervision

Ability to bend, lift, squat

Knowledge of shipping and receiving

Organizational skills

Work well with others

## **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Cashier, Salesperson, Supervisor

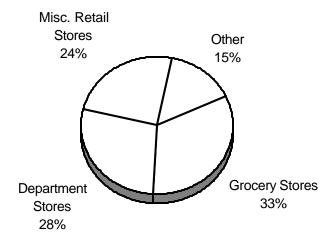
Nontraditional Occupation: No.

47% of workers in survey responses were female.

**Turnover:** High, 58% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE



Full-Time
100%
87%
53%
80%
93%
93%
53%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

#### **Most Frequently Used Recruitment Methods:**

Employee referrals, newpaper advertisements, unsolicited applicants, in-house promotion or transfer, public school or program referrals, Employment Development Department, corporate recruiting, job fairs, sign in store window.

#### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Stock Clerks - Sales Floor Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Stock Clerks - Sales Floor work full-time, 40 hours per week. Some work part-time, 25 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$5.00 - 7.00	\$5.25
New Hires, With Experience:	\$5.25 - 8.00	\$6.00
After Three Years With the Firm:	\$5.50 - 9.50	\$7.25

<sup>\*</sup>Data was collected prior to the minimum wage increase

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment:
OES Growth Projections:

Very large - 7,202 and above
New jobs through 2004: 300
Separations to 2004: 1,230
\*Total Openings: 1,530

**New Job Growth Rate:** 2.5%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 227

#### **Key Terms:**

# STOCK CLERKS - STOCKROOM, WAREHOUSE, STORAGE YARD OES 580230

Stock Clerks receive, store, and issue materials, equipment, and other items from stockroom, warehouse, or storage yard, and keep records and compile stock reports. Does not include Stockroom Laborers and workers whose primary duties involve shipping, weighing, and checking.

Alternate Job Titles: Receiving Clerks, Warehouse Clerks, Warehouse Person, Stockers

Related DOT Codes: 222.367-042, 222.387-026, 222.387-030, 222.387-058, 381.687-010

## EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have a high school diploma or equivalent.

**Training:** Most firms sometimes allow training to substitute for work experience. Many employers will provide on-the-job training, including customer service, company software and forklift certification. Employers prefer applicants with database and spreadsheet software skills.

**Experience:** Some firms usually require related work experience. They prefer applicants with 6 - 12 months experience as a Shipping and Receiving Clerk, Warehouse Worker or Forklift Operator

# **Skills rated "very important":**

Ability to follow written and verbal instructions

Ability to work independently

Ability to work as part of a team

Ability to read and understand stock invoices

Ability to do shelf stocking work

Ability to write legibly

Ability to stand for long periods of time

Oral communication skills

Ability to operate a forklift

Manual dexterity

Ability to lift at least 50 lbs. repeatedly

Record keeping skills

Understanding of inventory techniques

Basic math skills

Labeling skills

Computer skills

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Lead Stock Clerk, Traffic Coordinator, Warehouse Supervisor, and Inventory Manager.

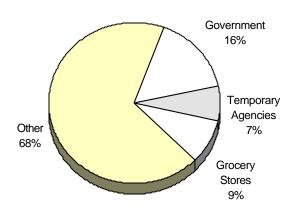
#### Nontraditional Occupation: Yes.

20% of workers in survey responses were female.

**Turnover:** Moderately low, 6% in the past 12 months.

<u>Unionization:</u> Yes. 7% of employers and 19% of employees were unionized.

#### WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	87%
Vision Insurance:	53%
Life Insurance:	87%
Paid Sick Leave:	73%
Paid Vacation:	100%
Retirement Plan:	80%

Other: 401-K Plan, Performance Bonus

## **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, private employment agencies, public school or program referrals, and San Diego Career Center Network.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	х
Not Difficult		

Job Market for: Stock Clerks

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many Stock Clerks work full-time, 40 hours per week or on a temporary or on call basis, 40 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$5.75 - 10.25	\$7.00
New Hires, With Experience:	\$6.50 - 10.75	\$8.00
After Three Years With the Firm:	\$8.50 - 18.00	\$10.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 1,330
Separations to 2004: 830
\*Total Openings: 2,160

**New Job Growth Rate:** 17.4%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.

9 project employment to grow, 5 expect employment to remain stable, and 1 expects employment to decline over the next three years.

**Education / Training Providers:** See Appendix A, page 227

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# SUBSTANCE ABUSE / CHEMICAL DEPENDENCY COUNSELORS

DOT 045.107-058

Substance Abuse Counselors counsel and aid individuals and families requiring assistance dealing with substance abuse problems such as alcohol or drug abuse. They interview clients, review records and confer with other professionals to evaluate condition of client. They formulate programs of treatment and rehabilitation of clients individually or in group sessions. Counsel family members to assist family in dealing with and providing support for client. Refer client to other support services as needed. Monitor condition of client to evaluate success of therapy and adapt treatment as needed. Prepare and maintain reports and case histories. May formulate and conduct programs to promote prevention of alchohol and drug abuse. May prepare documents for presentation in court.

Alternate Job Titles: Drug and Alcohol Counselor, Case Manager

Related DOT Codes: 195.107-010, 195.367-034

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have some college (but not necessarily a degree). A few have an associate degree.

<u>Training:</u> Many firms never allow training to substitute for work experience. Employers prefer applicants with a California Alcohol and Drug Counseling Certificate. They prefer those with word processing and data base software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 2 - 3 years prior experience as a Substance Abuse Counselor. A few employers hire counselors who are reformed from prior drug or substance abuse.

# **Skills rated "very important":**

Ability to read and follow instructions Counseling and case management skills Knowledge of alcohol and drug abuse treatments

Oral and verbal presentation skills

Ability to work as a team member

Report writing skills

Interpersonal skills

Observational and evaluation skills

Ability to work independently

Ability to interview others for information

Knowledge of prevention and treatment programs

Ability to develop a corrective action plan

Ability to be a role model and set goals

Ability to give job search assistance

Familiar with addictive disorders Ability to deal with ex-offenders

Knowledge of mental health & social service agencies

### **OCCUPATIONAL CHARACTERISTICS**

Career Ladders: Promote to: Supervisor, Program Coordinator. Program Director

Nontraditional Occupation: No.

46% of workers in survey responses were female.

**Turnover:** Moderately high, 27% in the past 12 months.

**Unionization:** No.

#### WHERE THE JOBS ARE

Community and Religious Organizations
Drug Treatment and Education Institutes
Drug Rehabilitation Services
Individual and Family Counseling Services
Social Service Agencies
Speciality Drug Clinics
Specialty Drug Rehabilitation Hospitals
Volunteer Organizations

	<u>Full-Time</u>
Medical Insurance:	94%
Dental Insurance:	76%
Vision Insurance:	47%
Life Insurance:	53%
Paid Sick Leave:	94%
Paid Vacation:	94%
Retirement Plan:	29%

Other: Room and Board

#### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, job postings, social service agencies, church referrals.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Substance Abuse Counselors

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Substance Abuse Counselors work full-time, 40 hours per week. A few work part-time, 22 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 14.50	\$10.25
New Hires, With Experience:	\$7.00 - 16.75	\$11.50
After Three Years With the Firm:	\$9.00 - 20.00	\$13.75

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 450

Separations to 2004: 240

\*Total Openings: 240

Openings for Substance Abuse Counselors are included in the general classification of Social Workers - - except medical and psychiatric.

**New Job Growth Rate:** 20.6%\*. Projected growth is about the same as the the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment :</u> Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 17 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 204

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **SURGICAL TECHNICIANS**

# **OES 329280**

Surgical Technicians assist the surgical team during surgical procedures and in the preparation for surgery. Under the direct supervision of a Registered Nurse they arrange sterile setups, count sponges, needles and instruments before and during surgery, check the operation of equipment and clean and restock the operating room. They may pass instruments and supplies to surgeons and may assist in transporting, positioning, prepping and draping patients for surgery. They may be known as surgical technologists. Does not include Surgical Assistants who perform such tasks as retracting tissue, suturing skin and suctioning blood during surgery.

Alternate Job Titles: Surgical Technologists, Operating Room Technicians

Related DOT Codes: 079.374-022

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most recent hires have some college (but not necessarily a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 6 - 12 months training in operating room techniques and possess a Surgical Technician Certificate.

**Experience:** Many firms usually require related work experience. They prefer applicants with 12 - 15 months prior experience as a Surgical Technician

or Licensed Vocational Nurse.

# **Skills rated "very important":**

Ability to follow oral technical instructions

Ability to read and follow instructions

Ability to work on a team

Knowledge of infection control (asepsis)

Knowledge of surgical instruments

Ability to sterilize surgical instruments

Ability to check surgical equipment for proper operation

Ability to interact with patients and hospital staff

Ability to handle crisis situations

Oral communication skills

Willingness to work nights, weekends and holidays

Ability to inventory surgical instruments

Knowledge of patient transferring techniques

Knowledge of anatomy and physiology and pharmacology

Ability to deal with trauma patients

Ability to troubleshoot and repair video equipment

#### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Registered Nurse with additional education

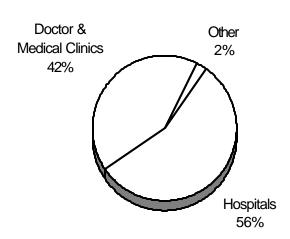
Nontraditional Occupation: No.

46% of workers in survey responses were female.

**Turnover:** High, 33% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	81%
Life Insurance:	100%
Paid Sick Leave:	94%
Paid Vacation:	100%
Retirement Plan:	88%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Employee referrals, unsolicited applicants, public schools or program referrals, newspaper advertisements, in-house promotion or transfer, private school referrals, Employment Development Department.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Surgical Technicians

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

Average Weekly Hours: Many Surgical Technicians work full-time, 42 hours per week. Some work on an on-call basis, 23 hours per week. A few work part-time, 20 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.50 - 12.75	\$10.50
New Hires, With Experience:	\$10.25 - 14.00	\$12.00
After Three Years With the Firm:	\$12.00 - 17.00	\$17.00

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 160

Separations to 2004: 100
\*Total Openings: 260

**New Job Growth Rate:** 24.6%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment :</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 227

#### **Key Terms:**

# SYSTEMS ANALYSTS - ELECTRONIC DATA PROCESSING

**OES 251020** 

Systems Analysts, Electronic Data Processing, analyze business, scientific and technical problems for application to electronic data processing systems. Does not include persons working primarily as engineers, mathematicians, programmers or scientists.

Alternate Job Titles: Programmer Analyst, Information Systems Analyst

Related DOT Codes: 030.167-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a bachelor degree.

**Training:** All reporting firms never allow training to substitute for work experience. Employers prefer applicants with word processing, spreadsheet, database and computer programming language skills.

**Experience:** Most firms always require related work experience. They prefer applicants with 2 - 4 years experience as a Network Analyst, Programmer Analyst or Systems Analyst.

# Skills rated "very important":

Ability to work on a team

Ability to read and follow instructions

Ability to think logically

Ability to work independently

Oral communication skills

Knowledge of network systems

Ability to analyze computer operational procedures

Interpersonal skills

Ability to evaluate computer systems

Ability to identify data processing problems

Ability to develop new information systems

Knowledge of internet technology

Ability to do technical writing and analysis

Ability to prepare time and cost estimates

Customer service skills

Data management skills

Computer programming skills

### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Senior Analyst,

Data Processing Manager.

Nontraditional Occupation: No.

30% of workers in survey responses were female.

**Turnover:** Moderately low, 9% in the past 12 months.

**Unionization:** No.

### WHERE THE JOBS ARE

Banks and Financial Institutions Computer Related Services **Data Processing Services Engineering Services** Government

Hospitals

Manufacturing Companies

Research Institutions

Schools and Colleges

	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	93%
Life Insurance:	100%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	93%

Other: 401-K Plan, Company Stock Options

# **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, industry publications, Career Center Network, web site, internet.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		X
Somewhat Difficult	X	
A Little Difficult		
Not Difficult		

Job Market for: System Analysts

Experienced applicants: Somewhat competitive Inexperienced applicants: Little competition

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers report System Analysts work full-time, 40 hours per week.

<b>Hourly Wages</b>	Range	Median
New Hires, No Experience:	\$11.50 - 24.00	\$16.25
New Hires, With Experience:	\$13.00 - 26.25	\$17.75
After Three Years With the Firm:	\$14.00 - 31.25	\$20.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 2,980

Separations to 2004: 250

\*Total Openings: 3,230

**New Job Growth Rate:** 64.8%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 227

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **TEACHERS - ELEMENTARY SCHOOL**

**OES 313050** 

Elementary School Teachers teach elementary (kindergarten through eighth grade) pupils in public or private schools basic academic, social and other formative skills. This does not include special education teachers who teach only handicapped pupils.

Alternate Job Titles: None

Related DOT Codes: 092.227-010

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree.

**Training:** Many firms usually allow training to substitute for work experience. Employers prefer applicants with the requisite State of California Teaching Credential, a requirement for teaching in public schools, and have word processing and Internet software skills.

**Experience:** Most firms usually require related work experience. They prefer applicants with 1 year experience as a Student Teacher, Teacher Intern or Elementary School Teacher.

# **Skills rated "very important":**

Patience with children

Classroom management skills

Possess a clean police record

Ability to work under pressure and handle crisis situations

Classroom discipline and supervision skills

Ability to obtain a State Teaching Credential

Oral communication skills

Ability to motivate students

Ability to read and follow instructions

Ability to write effectively

Record keeping skills

Ability to perform basic mathematical computations

Ability to work independently

Knowledge of various cultural backgrounds

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Special Education Teacher, Counselor, Vice Principal, Principal, and School Director.

**Nontraditional Occupation:** No.

76% of workers in survey responses were female.

**Turnover:** Very low, 3% in the past 12 months.

<u>Unionization:</u> Yes. 73% of employers surveyed and 97% of employees were unionized

# WHERE THE JOBS ARE:

Public and Private Elementary Schools

Full-Time	Part-Time
100%	33%
93%	27%
87%	33%
93%	33%
93%	
13%	
87%	13%
	100% 93% 87% 93% 93% 13%

Other: 125 Cafeteria Plan

# **Most Frequently Used Recruitment Methods:**

County Office of Education Placement Office, public school or program referrals, unsolicited applicants, newspaper advertisements, job fairs, and college placement offices.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	Х	
Not Difficult		

Job Market for: Elementary School Teachers

Experienced applicants: Competitive

Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Elementary School Teachers work full-time, 39 hours per week. A few work part-time, 19 hours per week.

Hourly Wages	Range*	Median*
New Hires, No Experience:	\$6.39 - 15.37	\$13.46
New Hires, With Experience:	\$6.67 - 17.66	\$14.80
After Three Years With the Firm:	\$7.46 - 22.41	\$17.55

<sup>\*</sup>Includes union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 1,490
Separations to 2004: 1,800
\*Total Openings: 3,290

New Job Growth Rate: 10.8%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

15 employers provided data to develop this profile.
6 project employment to grow, 8 expect employment to remain stable and 1 expects employment to decline over the next three years.

Education / Training Providers: See Appendix A, page 228

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this guestion.

# **TEACHERS - PRESCHOOL**

# **OES 313030**

Preschool Teachers instruct children (normally up to 5 years of age) in activities designed to promote social, physical and intelligent growth needed for primary school, in preschool, daycare center, or other child development facility. They may be required to have state certification.

Alternate Job Titles: Teacher Aides, Teacher Assistant, Child Development Specialist

**Related DOT Codes:** 092.227-018, 166.221-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms (59%) require an associate degree. Some (35%) require a high school diploma or equivalent.

**Training:** Many firms (41%) allow training to substitute for work experience. In private schools applicants must be 18 years of age and complete 12 semester units in early childhood education; or 6 months work experience in licensed day care center; or be a valid Child Development Associate and have 6 months on-the-job training and/or work experience. In public schools applicants must have an instructional permit issued by the Commission of Teacher Credentialing.

**Experience:** Almost all firms (94%) require 6 - 36 months related work experience. Some firms (19%) accept other occupational experience such as 6 - 24 months experience as a Child Care Provider, Camp Counselor or Nurse. Few responding employers report hiring inexperienced applicants.

# **Skills rated "very important":**

Patience with young children

Oral communication and report writing skills

Ability to plan and supervise work of students

Ability to monitor group child activities

Ability to motivate students

Ability to plan a course of instruction

Ability to read and follow instructions

Ability to work independently

Ability to give one-on-one instruction

Ability to keep records of student progress

Ability to involve parents in child's progress

Ability to work under pressure

Knowledge of first aid and CPR

Ability to plan daily and long-term schedules

Possession of a Child Development Associate credential (CDA)

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Associate Teacher, Supervisor, School Director, Assistant Teaching Supervisor.

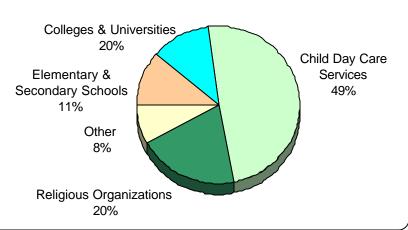
# Nontraditional Occupation: No.

99% of workers in survey responses were female.

**Turnover:** Moderate, 20% in the past 12 months.

Unionization: None reported.

# WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	59%	24%	12%
Dental Insurance:	47%	18%	24%
Vision Insurance:	24%	0%	71%
Life Insurance:	18%	6%	71%
Paid Sick Leave:	71%	18%	6%
Paid Vacation:	76%	18%	0%
Retirement Plan:	24%	12%	59%
Child Care:	53%	29%	12%

Other employer specified:Paid Holidays and Staff Days, Paid Organizational Membership

# **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, colleges and universities.

**Others include:** Postings with church associations.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		
Few Employers Hire		Х

Job Market for: Preschool Teachers

Experienced applicants: Little competition in job search Inexperienced applicants: Very competitive job search

# **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Most (68%) Preschool Teachers work full-time, 39 hours per week. Some (32%) work part-time, 23 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:	Not available	Not available
New Hires, With Experience:	\$6.75 - 9.00	\$7.50
After Three Years With the Firm:	\$7.00 - 11.00	\$8.75

# OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

**Size of 1999 Employment:** Large - Range 3,324 - 7,202 **OES Growth Projections:** New jobs through 2004: 780

Separations to 2004: 510 \*Total Openings: 1,290

**New Job Growth Rate:** 20.9%\*. Projected growth is faster than

the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.

10 project employment to remain stable and 7 expect employment to grow over the next two years.

**Education / Training Providers:** See Appendix A, page 228

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **TEACHERS - SECONDARY SCHOOL**

# **OES 313080**

Secondary School Teachers instruct students in public or private high schools in one or more subjects, such as English, mathematics or social studies. This includes vocational high school teachers but does not include special education teachers who teach only students with disabilities.

Alternate Job Titles: Junior High School Teacher, High School Teacher

Related DOT Codes: 091.227-010

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

Education: All recent hires have a bachelor degree.

**Training:** Many firms sometimes allow training to substitute for work experience. A State of California Teaching Credential is required for teaching in public schools. Some schools may require an additional 18 - 30 academic units for job applicants. Employers prefer applicants with word processing and other basic computer software skills.

**Experience:** Almost all firms sometimes require related work experience. They prefer applicants with 1 - 2 years experience as a Student/Substitute Teacher, Elementary/High School Teacher.

# **Skills rated "very important":**

Patience with children

Classroom management skills

Oral communication skills

Classroom discipline and supervision skills

Ability to obtain State Teaching Credential

Ability to work under pressure and handle crisis situations

Ability to work independently

Possess a clean police record

Ability to read and follow instructions

Ability to motivate students

Record keeping skills

Ability to write effectively

Possess imagination and creativity

Ability to perform basic mathematical computations

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Resource Teacher, Student Counselor, Assistant/Vice Principal, School Dean, and Director of Curriculum.

Nontraditional Occupation: No.

64% of workers in survey responses were female.

**Turnover:** Very low, 3% in the past 12 months.

**Unionization:** Yes. 75% of employers and 96% of employees were unionized.

# WHERE THE JOBS ARE:

High Schools Middle Schools Private Schools Secondary Schools

	<u>Full-Time</u>	Part-Time
Medical Insurance:	94%	50%
Dental Insurance:	88%	50%
Vision Insurance:	94%	44%
Life Insurance:	94%	38%
Paid Sick Leave:	88%	6%
Paid Vacation:	0%	6%
Retirement Plan:	94%	13%

Other: Long Term Disability

# **Most Frequently Used Recruitment Methods:**

Unsolicited applicants, public schools or program referrals, County Office of Education, and college placement offices.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	Х	Х
Not Difficult		

Job Market for: Secondary School Teachers

Experienced applicants: Competitive Inexperienced applicants: Competitive

### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Secondary School Teachers work full-time, 38 hours per week. A few work part-time, 20 hours per week.

Hourly Wages	Range <sup>*</sup>	Median*
New Hires, No Experience:	\$10.74 - 15.71	\$13.61
New Hires, With Experience:	\$11.36 - 17.66	\$15.55
After Three Years With the Firm:	\$12.95 - 26.62	\$17.62

<sup>\*</sup>Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above New jobs through 2004: 1,940 Separations to 2004: 2,310

\*Total Openings: 4,250

**New Job Growth Rate:** 18.5%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
8 project employment to grow and 8 expect employment to remain stable over the next three years.

Education / Training Providers: See Appendix A, page 228

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# TEACHERS AND INSTRUCTORS - VOCATIONAL EDUCATION AND TRAINING

**OES 313140** 

Vocational Education and Training Teachers and Instructors teach or instruct vocational and/or occupational subjects at the post-secondary level (but less than the baccalaureate) to students who have graduated or left high school. They teach subjects such as business, secretarial science, data processing, trades, or practical nursing. Includes correspondence school instructors; industrial, commercial or government training instructors; and instructors who prepare persons to operate industrial machinery and equipment and transportation and communications equipment. They may teach in public or private schools or in schools associated with organizations whose primary business is other than education.

Alternate Job Titles: Trainer, Instructor, Clinic Instructor, Instructor/Counselor, Teacher Associate, Credentialed Teacher

**Related DOT Codes:** 090.222-010, 092.227-018, 097.221-010, 166.221-010, 375.227-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many firms (50%) require a high school diploma or equivalent. Some (33%) require an associate degree and a few (17%) require a bachelor degree.

**Training:** Few( 4%) firms allow training to substitute for work experience. Most firms (63%) do not require technical or vocational training. Employers prefer applicants with 2 - 5 years training in the subject area they will be teaching and with word processing, spreadsheet and database computer software skills or software specific to a particular vocation.

**Experience:** Almost all firms (96%) require 1 - 5 years related work experience. Some firms (29%) accept other occupational experience such as 3 - 5 years industry related experience in the area of instruction. Few employers report hiring inexperienced applicants.

# Skills rated "very important":

Oral communication skills

Ability to plan and supervise work of students

Ability to keep current in field of instruction

Patience with students

Ability to motivate students

Ability to test and evaluate student achievement

Ability to read and follow instructions

Ability to prepare instructional materials and plan a course of instruction

Ability to work independently

Possess state teaching certificate

Ability to work under pressure

Ability to train students in the use of new computer software

Willingness to work part-time

Report writing and basic math skills

Ability to access new employment and skill trends

### **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Instructor Supervisor, Lead Instructor, Program Specialist Coordinator, Director of Education/Operations, Student Administrator, Job Placement Director/Coordinator, Case Manager, School Director, School Superintendent.

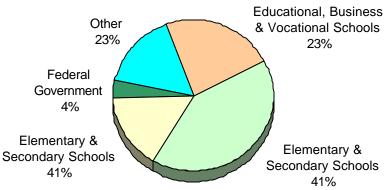
### Nontraditional Occupation: No.

52% of workers in survey responses were female.

**Turnover:** Moderate, 17% in the past 12 months.

**Unionization:** Yes. 17% of employers and 51% of employees were unionized.

### WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	<u>E'er Pays Al</u> l	Shared Cost	Not Provided
Medical Insurance:	33%	25%	4%
Dental Insurance:	29%	13%	21%
Vision Insurance:	21%	17%	25%
Life Insurance:	25%	8%	29%
Paid Sick Leave:	54%	0%	8%
Paid Vacation:	58%	0%	4%
Retirement Plan:	13%	8%	38%
Child Care	0%	4%	58%

Other employer specified: Tuition Reimbursement, Paid Holidays

### **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, internet.

Others include: Job line, County Office of Education.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Moderately Difficult	Х	
Not Difficult		
Few Employers Hire		X

Job Market for: Vocational Teachers and Instructors

Experienced applicants: Little competition in job search

Inexperienced applicants: Very competitive job search

# **HOURS, SHIFTS AND WAGES**

Average Weekly Hours: Most (79%) Vocational Teachers and Instructors work part-time, 20 hours per week. A few (17%) work full-time, 38 hours per week or on a temporary or on-call basis (4%), 6 hours per week.

**Shifts:** All employers (100%) report having day shifts. Many (54%) also have evening teaching assignments.

Hourly Wages <sup>*</sup>	Range *	Median *
New Hires, No Experience:	\$12.00	\$12.00
New Hires, With Experience:	\$8.00 - 27.59	\$13.50
After Three Years With the Firm:	\$10.00 - 32.02	\$17.87

<sup>\*</sup>Combined union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

 Size of 1999 Employment:
 Large - Range 3,324 - 7,202

 OES Growth Projections:
 New jobs through 2004: 700

 Separations to 2004: \*Total Openings: 920

New Job Growth Rate: 21.7%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

### **Employer Responses and Employment Outlook:**

24 employers provided data to develop this profile.
15 project employment to grow, 8 expect employment to remain stable, and 1 expects employment to decline over the next two years.

**Education / Training Providers:** See Appendix A, page 228

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **TECHNICAL WRITERS**

OES 340050

Technical Writers write or edit technical materials, such as equipment manuals, appendices and operating and maintenance instructions. They may oversee the preparation of illustrations, photographs, diagrams and charts and assist in layout work.

Alternate Job Titles: Documentation Specialists, Publications Specialists

Related DOT Codes: 131.267-026

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All recent hires have a bachelor degree.

**Training:** Almost all firms never allow training to substitute for work experience. Employers prefer applicants with word processing, desktop publishing, spreadsheet, database, and graphics animation software skills.

**Experience:** Almost all firms always require related work experience. They prefer applicants with 2 - 4 years experience as a technical writer.

# Skills rated "very important":

Word processing skills Ability to read and follow instructions

Knowledge of good English and grammar

Ability to work independently

Ability to pay attention to detail

Ability to edit written material of others

Ability to interpret technical material

Ability to read and evaluate written material

Ability to layout materials for publication

Ability to interview others for information

Ability to read and understand catalogs and manuals

Willingness to work long hours

Ability to meet deadlines

Ability to work on a team

Interpersonal skills

### OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to; Senior Technical Writer, Supervisor

Nontraditional Occupation: No.

43% of workers in survey responses were female.

**Turnover:** Moderate, 14% in the past 12 months.

Unionization: No.

### WHERE THE JOBS ARE

Computer Related Services **Engineering Services** Government Help Supply Services Hospitals Manufacturing Companies

Research Institutions

Software Development Companies

	Full-Time
Medical Insurance:	93%
Dental Insurance:	93%
Vision Insurance:	79%
Life Insurance:	86%
Paid Sick Leave:	93%
Paid Vacation:	100%
Retirement Plan:	86%
Other: 401-K Plan, Profit S	Sharing

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referral, Career Center Network, web page, internet.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Technical Writers

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers indicate Technical Writers work full-time, 42 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$10.00 - 22.00	\$15.00
New Hires, With Experience:	\$13.50 - 24.00	\$18.00
After Three Years With the Firm:	\$16.75 - 32.00	\$23.75

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 210

<u>Separations to 2004:</u> 110 \*Total Openings: 330

**New Job Growth Rate:** 30.9%\*. Projected growth is much faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 229

#### **Key Terms:**

# TELEPHONE AND CABLE T.V. LINE INSTALLERS AND REPAIRERS

### **OES 857020**

Telephone and Cable T.V. Line Installers and Repairers install and repair telephone and telegraph lines, television distribution cables, poles and related equipment, such as supports, insulation and quywire systems. Other duties may include locating and repairing defects in existing systems and placing, rearranging and removing underground or aerial cables.

<u>Alternate Job Titles:</u> Cable Technicians, Cable Pullers, Cable Installers, Service Technicians, Maintenance Technicians, Telephone Installers, Telephone Technicians, Central Office Equipment Installers

Related DOT Codes: 821.281-010, 822.381-014

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all firms (94%) require a high school diploma or equivalent.

**Training:** Many firms (47%) allow 6 - 24 months training to substitute for work experience. Some firms (25%) require technical or vocational training which maybe company on-the-job training or manufacturer's equipment certification.

**Experience:** Most firms (69%) do not require but prefer applicants with 6 -24 months of previous lineman installer work experience. Some firms (33%) accept other occupational experience such as 6 - 12 months experience as an Electrician, Electronics Technician, Computer Repairer or other telecommunications background.

# Skills rated "very important":

Knowledge of safety equipment and procedures

Ability to work independently

Oral communication skills

Ability to work under pressure

Ability to use small hand tools

Ability to read and interpret service orders

Knowledge of electricians tools and test equipment

Willingness to be on call

Ability to read blueprints and circuit diagrams

Ability to install cable or telephone wiring underground or on poles

Ability to climb, lift or work in stooped and cramped positions

Ability to install terminal boxes and lead-in wires

Knowledge of television and cable wiring systems

Soldering and splicing skills

Math skills

Reliability

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Technician Supervisor, Lead Installer, Installation Service Manager, Project Manager/ Coordinator/Supervisor, Senior Technician, Field Supervisor, Installation Supervisor, Cable Programmer.

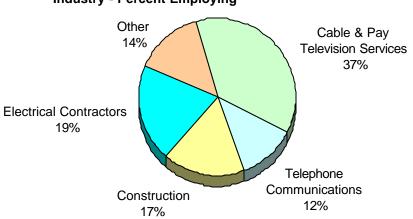
### Nontraditional Occupation: Yes.

7% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

**Unionization:** None reported.

# WHERE THE JOBS ARE



# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	38%	56%	0%
Dental Insurance:	25%	44%	25%
Vision Insurance:	6%	25%	63%
Life Insurance:	25%	19%	50%
Paid Sick Leave:	44%	6%	44%
Paid Vacation:	81%	6%	6%
Retirement Plan:	38%	13%	44%
Child Care	0%	0%	94%

Other employer specified: 401-K Plan, Profit Sharing, Paid Holidays, Cash Bonus Plan

# **Three Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer.

**Others include:** Job hotline, ex-military personnel, referrals from other companies, San Diego Career Center Network.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		Х
Not Difficult		
Few Employers Hire		

Job Market for: **Telephone and Cable T.V. Line Installers** *Experienced* applicants: **No competition in job search** *Inexperienced* applicants: **Little competition in job search** 

# **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> Almost all (98%) Telephone and Cable T.V. Line Installers work full-time, 42 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages	Range	Median
New Hires, No Experience:		
	\$6.00 - 12.00	\$7.63
New Hires, With Experience:		
	\$8.00 - 15.34	\$10.00
After Three Years With the Firm:		
	\$9.75 - 20.00	\$13.00

Some employers may also pay a bonus or commissions.

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 230

Separations to 2004: 110 \*Total Openings: 340

New Job Growth Rate: 30.3%\*. Projected growth is much faster

than the county-wide average of 17.7%\*.

\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.
10 project employment to grow and 6 expect employment to remain stable over the next two years.

Education / Training Providers: See Appendix A, page 229

#### **Kev Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

# **TOOL AND DIE MAKERS**

# **OES 891020**

Tool and Die Makers analyze a variety of specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinist's hand tools. Includes paper die makers and die sinkers, but does not include die setters.

Alternate Job Titles: Tool Makers, Tool Cutter Grinders, Tool and Die Maker Specialists, CNC Machine Operators

Related DOT Codes: 601.260-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Most firms (75%) require a high school diploma or equilalent. A few (19%) require less than a high school education.

**<u>Training:</u>** Some firms (25%) allow vocational or trade school training to substitute for work experience. Many firms (50%) require technical or vocational training.

**Experience:** Almost all firms (88%) require 3 - 5 years related work experience. Few firms (14%) accept other occupational experience. Few employers report hiring inexperienced applicants.

# **Skills rated "very important":**

Ability to read and interpret blueprints or sketches

Ability to pay attention to detail

Ability to operate lathes, milling machines, shapers and grinders

Knowledge of machining and layout techniques

Knowledge of shop mathematics

Ability to stand continuously for 2 or more hours

Ability to work on a team

Ability to work independently

Ability to work under pressure and meet deadlines

Knowledge of tool and die design and construction

Good hand-eye coordination

Ability to use machinists hand tools and power tools

Ability to use precision measuring instruments

Knowledge of safe working practices and safety gear

Familiarity with computer numerically controlled machining (CNC)

Ability to use numerically controlled machine tools (NC)

Metalworking, fabrication and repair skills

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Tool & Die Maker, Team Leader, Tool Room Supervisor, Journeyman, Senior Tool & Die Maker, Mechanical Engineer (with additional education).

Nontraditional Occupation: Yes.

3% of workers in survey responses were female.

**Turnover:** Very low, 3% in the past 12 months.

**<u>Unionization:</u>** Yes. 19% of employers and 46% of employees were unionized.

# WHERE THE JOBS ARE

# Industry

Aircraft Parts and Equipment
Computer Equipment
Electronic Instruments
Engine and Turbine Manufacturing
Machine Tools and Metal Forming
Plastic Products
Sporting and Athletic Goods
Tool and Die Manufacturing

# FRINGE BENEFITS, WHO PAYS\*

### **Full Time Employees**

	E'er Pays All	<b>Shared Cost</b>	Not Provided
Medical Insurance:	75%	25%	0%
Dental Insurance:	75%	19%	6%
Vision Insurance:	69%	19%	13%
Life Insurance:	69%	19%	13%
Paid Sick Leave:	69%	13%	19%
Paid Vacation:	88%	13%	0%
Retirement Plan:	38%	19%	19%
Child Care	0%	0%	100%

Other employer specified: 401-K Plan

### **Three Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, internet.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult	Х	
Moderately Difficult		
Not Difficult		
Few Employers Hire		X

Job Market for: Tool and Die Makers

Experienced applicants: No competition in job search Inexperienced applicants: Very competitive job search

# **HOURS, SHIFTS AND WAGES**

<u>Average Weekly Hours:</u> All (100%) Tool and Die Makers work full-time, 40 hours per week.

**Shifts:** All employers (100%) report having day shifts.

Hourly Wages*	Range*	Median *
New Hires, No Experience:	\$13.27 - 15.18	\$14.23
New Hires, With Experience:	\$10.50 - 18.45	\$15.00
After Three Years With the Firm:	\$12.50 - 26.37	\$20.00

<sup>\*</sup>Combined union and non-union wages

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 60

Separations to 2004: 90 \*Total Openings: 150

New Job Growth Rate: 7.2%\*. Projected growth is slower than

the county-wide average of 17.7%\*.
\*7 Year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

13 project employment to remain stable and 3 expect employment to grow over the next two years.

Education / Training Providers: See Appendix A, page 229

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers responding to this question

TRAVEL AGENTS OES 430210

Travel Agents plan entire trips for customers of their travel agency. Their duties include determining destinations, modes of transportation, travel dates, costs, accommodations required and planning, describing or selling itinerary package tours. Travel Agents may specialize in foreign or domestic service, individual or group travel, specific geographical area, airplane charters or package tours.

Alternate Job Titles: Leisure Travel Agent, Destinations Agent, Travel Consultant

Related DOT Codes: 252.152-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have some college (but not necessarily a degree).

<u>Training:</u> Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 3 - 6 months vocational training at a private school or ROP and word processing and database computer software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 6 - 12 months experience in the hotel / motel, airline or tour industries.

# **Skills rated "very important":**

Telephone answering skills

Public contact and customer service skills

Oral communication skills

Ability to read and follow instructions

Ability to use a computer

Ability to sit for long periods of time

Ability to work independently

Knowledge of Sabre / Apollo / World Span / System 1

Knowledge of geography

Record keeping skills

Ability to write legibly

Patience

Reliability

Interpersonal skills

Ability to handle stress

Positive attitude

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Tour Coordinator,

Office Manager

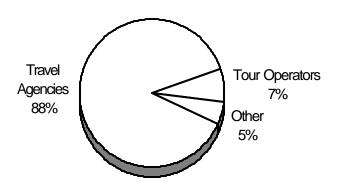
Nontraditional Occupation: No.

78% of workers in survey responses were female.

**Turnover:** Moderate, 12% in the past 12 months.

**Unionization:** No.

# WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	81%
Dental Insurance:	56%
Vision Insurance:	19%
Life Insurance:	31%
Paid Sick Leave:	94%
Paid Vacation:	100%
Retirement Plan:	13%
Child Care:	6%

Other: Travel Benefits

### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, public school or program referrals, private school referrals.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Travel Agents

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Travel Agents work full-time, 40 hours per week. Few work part-time, 21 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 9.00	\$6.25
New Hires, With Experience:	\$7.00 - 11.50	\$9.00
After Three Years With the Firm:	\$8.00 - 15.00	\$11.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 280

<u>Separations to 2004:</u> 250 \*Total Openings: 530

**New Job Growth Rate:** 20.6%\*. Projected growth is about the same as the county-wide average is 18.1%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Many responding employers project employment to grow over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 229

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# TRUCK DRIVERS - HEAVY OR TRACTOR TRAILER

# **OES 971020**

Heavy or Tractor Trailer Truck Drivers drive tractor-trailer combinations or trucks with a capacity of more than three tons to transport and deliver goods, livestock, or materials in liquid, loose or packaged form. They may be required to unload trucks.

Alternate Job Titles: Delivery Specialists, Tractor Trailer Drivers, Tank Truck Drivers, Mixer Drivers, Container Truck Drivers

**Related DOT Codes:** 903.683-018, 904.383-010, 905.663-014, 905.683-018

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Almost all recent hires have a high school diploma or equivalent. A few have some college (but not necessarily a degree).

**Training:** Many firms never allow training to substitute for work experience. Employers prefer applicants with either a Class "A" or "B" drivers license. Some employers provide on-the-job safety and hazardous waste training and look for applicants with data entry software skills.

**Experience:** Many firms always require related work experience. They prefer applicants with 1 - 3 years experience as a Heavy Truck Driver, Class "A" Tractor Trailer Driver, Pickup Delivery Driver or Moving and Storage Driver.

### **Skills rated "very important":**

Possession of a valid Class "A" drivers license

Possession of a good DMV driving record

Customer service skills

Ability to work independently

Ability to read and follow instructions

Ability to load and unload freight

Oral communication skills

Ability to read invoices and keep accurate records

Map reading skills

Good physical condition

Ability to lift at least 50 lbs. repeatedly

Basic math skills

Bondable

Ability to write legibly

Ability to operate a forklift or pallet jack

Ability to sit for long periods of time

Knowledge of satellite tracking systems

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Driver, Dock Supervisor, Warehouse Manager, Transportation Foreman/Supervisor, and Dispatcher.

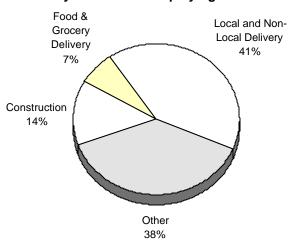
Nontraditional Occupation: Yes.

None of the workers in survey responses were female.

**Turnover:** Moderately low, 8% in the past 12 months.

<u>Unionization:</u> Yes. 35% of employers and 33% of employees were unionized.

### WHERE THE JOBS ARE



	<u>Full-Time</u>	Part-Time
Medical Insurance:	94%	
Dental Insurance:	94%	
Vision Insurance:	65%	
Life Insurance:	65%	
Paid Sick Leave:	59%	6%
Paid Vacation:	94%	6%
Retirement Plan:	71%	

Other: 401-K Plan, Bonus Plan, Profit Sharing

# **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer, unsolicited applicants, public school or program referrals, and truck driving schools.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Heavy Truck Drivers

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Heavy Truck Drivers work full-time, 49 hours per week. A few work part-time, 31 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$8.00 - 15.00 \$10.00 - 18.75	\$11.19 \$11.50
New Hires, With Experience: Union:	\$9.25 -19.00 \$11.00 - 18.75	\$14.00 \$12.50
After Three Years With the Firm: Union:	\$12.75 - 26.00 \$12.50 - 18.75	\$17.50 \$16.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Large - Range 3,324 - 7,202

OES Growth Projections: New jobs through 2004: 980

Separations to 2004: 470

\*Total Openings: 1,450

**New Job Growth Rate:** 21.9%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

17 employers provided data to develop this profile.
14 project employment to grow and 3 expect employment to remain stable over the next three years.

**Education / Training Providers:** See Appendix A, page 230

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# TRUCK DRIVERS, LIGHT - DELIVERY AND ROUTE WORKERS

OES 971050

Light Truck Drivers, including Delivery and Route Workers, drive vehicles with a capacity under 3 tons. They deliver or pick up merchandise and may load and unload trucks. This category does not include workers whose duties include sales.

Alternate Job Titles: Delivery Drivers, Route Drivers

**Related DOT Codes:** 906.683-010, 906.683-022

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** Most recent hires have a high school diploma or equivalent. Some have taken college courses (but not necessarily obtained a degree) and a few have an associate degree.

<u>Training:</u> Some firms never allow training to substitute for work experience. Many employers will train drivers in safe operating procedures and prefer applicants with database software skills.

**Experience:** Some firms sometimes require related work experience. They prefer applicants with 3 - 12 months experience as Route or Delivery Drivers, or Commercial Truck Drivers.

# **Skills rated "very important":**

Possession of a good DMV driving record

Customer service skills

Ability to work independently

Ability to load and unload freight

Map reading skills

Ability to write legibly

Ability to read and follow instructions

Oral communication skills

Knowledge of local streets

Record keeping skills

Ability to read invoices

Ability to lift at least 50 lbs. repeatedly

Good physical condition

Basic math skills

Willingness to work flexible schedules

### OCCUPATIONAL CHARACTERISTICS

<u>Career Ladders:</u> Promote to: Lead Driver, Warehouse Supervisor/Manager, Driver Trainer, and Sales Representative.

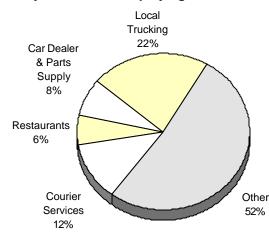
Nontraditional Occupation: Yes.

14% of workers in survey responses were female.

**Turnover:** Moderate, 11% in the past 12 months.

**Unionization:** Yes. 6% of employers and 10% of employees were unionized.

WHERE THE JOBS ARE



	Full-Time	Part-Time
Medical Insurance:	88%	12%
Dental Insurance:	71%	12%
Vision Insurance:	65%	12%
Life Insurance:	47%	12%
Paid Sick Leave:	65%	12%
Paid Vacation:	88%	12%
Retirement Plan:	47%	6%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, employee referrals, unsolicited applicants, and in-house promotion or transfer.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		X
A Little Difficult	Х	
Not Difficult		

Job Market for: **Light Truck Drivers** *Experienced* applicants: **Competitive** 

Inexperienced applicants: Somewhat competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Almost all Light Truck Drivers work full-time, 41 hours per week. A few work part-time, 24 hours per week.

Hourly Wages	Range <sup>*</sup>	Median*
New Hires, No Experience:	\$5.75 - 10.50	\$7.68
New Hires, With Experience:	\$5.75 - 12.00	\$8.08
After Three Years With the Firm:	\$6.50 - 18.00	\$10.00

<sup>\*</sup> Includes union and non-union wages

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very large - 7,202 and above
OES Growth Projections: New jobs through 2004: 2,810
Separations to 2004: 1,270

<u>Separations to 2004:</u> 1,270 \*Total Openings: 4,080

**New Job Growth Rate:** 23.4%\*. Projected growth is faster than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

# **Employer Responses and Employment Outlook:**

18 employers provided data to develop this profile.
12 project employment to grow, 5 expect employment to remain stable and 1 expects employment to decline over the next three years.

**Education / Training Providers:** No formal education or training programs for this occupation.

#### **Key Terms:**

UNDERWRITERS OES 211020

Underwriters review individual applications for insurance to evaluate degree of risk involved and determine acceptance of applications.

Alternate Job Titles: Personal Line Underwriter

Related DOT Codes: 169.267-046

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have some college (but not necessarily a degree). Some have a high school diploma or equivalent.

**Training:** Some firms sometimes allow training to substitute for work experience. Employers prefer applicants with spreadsheet, word processing and database software skills. Some firms provide in-house training or Insurance Association training.

**Experience:** Many firms always require related work experience.

They prefer applicants with 2 - 3 years underwriting experience

# Skills rated "very important":

Ability to read and follow instructions

Ability to work independently

Ability to evaluate and classify persons for insurance

Ability to determine acceptable risk

Oral communication skills

Ability to read and understand insurance documents

Ability to make important judgements

Ability to analyze data

Business math skills

Ability to record and keep accurate records

Report writing skills

Ability to use a computer

Knowledge of underwriting software

Ability to work on a team

Negotiating skills

# **OCCUPATIONAL CHARACTERISTICS**

**<u>Career Ladders:</u>** Promote to: Supervisor or Manager.

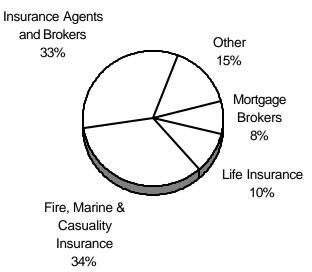
### Nontraditional Occupation: No.

71% of workers in survey responses were female.

**Turnover:** Moderate, 16% in the past 12 months.

Unionization: No.

### WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	100%
Dental Insurance:	100%
Vision Insurance:	62%
Life Insurance:	85%
Paid Sick Leave:	100%
Paid Vacation:	92%
Retirement Plan:	85%

Other: 401-K Plan

# **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, unsolicited applicants, private employment agencies.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	
A Little Difficult		X
Not Difficult		

Job Market for: Underwriters

Experienced applicants: Somewhat competitive

*Inexperienced* applicants: **Competitive** 

### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Underwriters work full-time, 39 hours per week. A few work part-time, 25 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$6.00 - 16.00	\$11.25
New Hires, With Experience:	\$8.00 - 20.25	\$13.50
After Three Years With the Firm:	\$10.00 - 22.75	\$18.00

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 80

Separations to 2004: 100 \*Total Openings: 180

New Job Growth Rate: 14.5%\*. Projected growth is slower than

the county-wide average of 17.7%\*.

\*7 year period 1994 through 2001.

<u>Employer Outlook on Employment :</u> Many responding employers project employment to remain stable over the next three years.

**Employer Responses:** 14 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 230

#### **Key Terms:**

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **VOCATIONAL AND EDUCATIONAL COUNSELORS**

**OES 315140** 

Vocational and Educational Counselors counsel individuals and provide group educational and vocational guidance services.

Alternate Job Titles: Employment Specialists, Job Developers, Career / Rehabilitation Counselors

Related DOT Codes: 045.107-010, 045.107-042, 166.267-034

# EDUCATION, TRAINING, EXPERIENCE AND SKILLS

**Education:** All recent hires have a bachelor degree. Many have completed additional studies and have a graduate degree.

**Training:** Many firms sometimes allow training to substitute for work experience. Employers prefer applicants with 1 - 2 years training as an intern, counselor or job developer and who have word processing, spreadsheet, database and Internet software skills.

**Experience:** Many firms usually require related work experience. They prefer applicants that possess a counseling certificate. School counselors require a Pupil Personnel Services Credential. Rehabilitation Counselors may have to be certified by the Commission on Rehabilitation.

# Skills rated "very important":

Oral communication and verbal presentation skills Interpersonal skills and customer service skills

Customer service skills

Ability to assess training needs of clients

Ability to interview others for information

Knowledge of local sources of job training

Knowledge of various cultural backgrounds

Knowledge of local labor market trends

Knowledge of job search assistance and development techniques

Ability to teach and assist in resume writing

Knowledge of job search skills

Report writing skills

Ability to use a computer

Management and organizational skills

Career Testing

Internet Research Skills

### OCCUPATIONAL CHARACTERISTICS

**Career Ladders:** Promote to: Program Coordinator, and management positions.

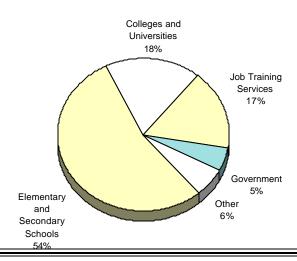
### **Nontraditional Occupation:** No.

73% of workers in survey responses were female.

**Turnover:** Moderately high, 27% in the past 12 months.

<u>Unionization:</u> Yes. 25% of employers and 23% of employees were unionized.

# WHERE THE JOBS ARE



	<u>Full-Time</u>
Medical Insurance:	100%
Dental Insurance:	86%
Vision Insurance:	71%
Life Insurance:	64%
Paid Sick Leave:	86%
Paid Vacation:	71%
Retirement Plan:	64%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

### **Most Frequently Used Recruitment Methods:**

Newspaper advertisements, in-house promotion or transfer, employee referrals, public school or program referrals, Employment Development Department, and San Diego Career Center Network.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	
A Little Difficult		Х
Not Difficult		

Job Market for: Vocational and Educational Counselors

Experienced applicants: Somewhat competitive

Inexperienced applicants: Competitive

### **HOURS AND WAGES**

**Average Weekly Hours:** Almost all Vocational and Educational Counselors work full-time, 40 hours per week. A few work part-time, 21 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience:	\$9.00 - 15.00	\$11.99
Union:	\$12.47 - 16.00	\$14.59
New Hires, With Experience:	\$12.00 - 20.00	\$13.90
Union:	\$13.43 - 22.00	\$15.41
After Three Years With the Firm: Union:	\$13.50 - 21.00 \$14.38 - 27.00	\$17.43 \$18.29

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Small - Less than 1,662

**OES Growth Projections:** New jobs through 2004: 240

Separations to 2004: 240
\*Total Openings: 480

**New Job Growth Rate:** 16.4%\*. Projected growth is about the same as the county-wide average of 17.7%\*.

# **Employer Responses and Employment Outlook:**

16 employers provided data to develop this profile.

13 expect employment to remain stable and 3 project employment to grow over the next three years.

Education / Training Providers: See Appendix A, page 203

#### **Key Terms:**

<sup>\*7</sup> year period 1997 through 2004.

# WAITERS and WAITRESSES (Banquet Servers)

# Sub part of OES 650080

Waiters and Waitresses serve food and / or beverages to patrons at tables. They usually take orders from patrons and make out the check. Their duties may include setting tables with linen and silverware and taking payment from patrons. They may serve customers at counters as well as at tables. Banquet Waiters and Waitresses serve meals and drinks to patrons attending group functions such as banquets, weddings, ceremonies and other special events. Does not include workers who only work at counters.

Alternate Job Titles: Formal Waiter / Waitress, Banquet Waiter / Waitress, Servers

Related DOT Codes: 311.137-014, 311.477-026

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Almost all recent hires have a high school diploma or equivalent. A few have some college (but not necessarily a degree).

**Training:** Many firms sometimes allow training to substitute for work experience. Employers usually provide on-the-job training for employees and require a county food handling card.

**Experience:** Many firms usually require related work experience. They prefer applicants with 1 year prior experience as a Waiter / Waitress or food / beverage handler.

# **Skills rated "very important":**

Possession of a county food handling card Public contact and customer service skills

Willingness to work nights, weekends and holidays

Ability to follow oral instructions

Ability to read and follow instructions

Ability to work on a team

Ability to get along with co-workers

Ability to work under pressure

Oral communication skills

Ability to stand for long periods of time

Customer service skills

Knowledge of wines

Ability to perform table side saute

Nice appearance and good grooming habits

Ability to lift 40lbs / carry heavy trays

# **OCCUPATIONAL CHARACTERISTICS**

<u>Career Ladders:</u> Promote to: Banquet Manager, Server Captain, Party Manager

Nontraditional Occupation: No.

45% of workers in survey responses were female.

**Turnover:** Very low, 2% in the past 12 months.

<u>Unionization:</u> Yes. 19% of employers and 60% of employees surveyed.

### WHERE THE JOBS ARE

Caterers Hotels

Upscale Restaurants

	Full-Time
Medical Insurance:	100%
Dental Insurance:	92%
Vision Insurance:	42%
Life Insurance:	67%
Paid Sick Leave:	58%
Paid Vacation:	83%
Retirement Plan:	42%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements.

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Waiters and Waitresses (Banquet Servers)

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Many Waiters / Waitresses (Banquet Servers) work part-time, 24 hours per week. Some work on a temporary basis, 10 hours per week and a few work full-time, 37 hours per week.

	^	, and the second
Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$5.00 - 25.50 \$7.00 - 16.50	\$13.00 \$15.25
New Hires, With Experience: Union:	\$6.50 - 26.00 \$7.00 - 21.50	\$14.00 \$17.25
After Three Years With the Firm: Union:	\$8.00 - 28.00 \$8.50 - 24.50	\$17.00 \$20.25

<sup>\*</sup> Combined base wage and estimated tips collected.

#### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Very Large - 7,202 and above

New jobs through 2004: 1,920

Separations to 2004: 6,810

\*Total Openings: 8,730

**New Job Growth Rate:** 11.0%\*. Projected growth is slower than the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

Openings for Banquet Waiters and Waitresses are included in the general classification of Waiters and Waitresses.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to grow over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

**Education / Training Providers :** See Appendix A, page 230

#### **Kev Terms:**

# **WEBMASTERS / WEB SITE DESIGNERS**

# **No OES Code - Emerging Occupation**

Webmasters / Web Site Designers are responsible for managing the content and artistic design of an organization's internet web site and updating web site material. Web Site Designers use specialized software to design and create web pages for the Internet's World Wide Web. They develop innovative ways of using digitized multimedia elements to communicate messages of businesses, agencies, organizations etc. to customers, employees and / or the world at large.

Alternate Job Titles: Web Designers, Content Developers

Related DOT Codes: 030.162-010

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** Many recent hires have a bachelor degree. Some have an associate degree.

**Training:** Most firms never allow training to substitute for work experience. Employers prefer applicants with word processing, desktop publishing, and database software skills. Some prefer training in computer graphics applications.

**Experience:** Many firms usually require related work experience. They prefer applicants with 6 months to 2 years experience as a Graphic Artist, Graphic Designer or Web Site Designer.

# Skills rated "very important":

Knowledge of Windows and Macintosh platforms

Ability to work independently

Creativity

Ability to work under pressure and meet deadlines

Web site design and editing skills

Ability to design computer graphic images

Knowledge of: Photoshop, Quark Express, Adobe Illustrator

Interface design skills

Ability to create and edit hypertext markup

Knowledge of download time, bandwidth and internet browsers

Oral communication skills

Knowledge of cross platform issues

Knowledge of Java, PERL and VRML programming

HTML web design skills

Knowledge of internet protocols

Customer service skills

### **OCCUPATIONAL CHARACTERISTICS**

**Career Ladders:** Promote to: Production Manager

Nontraditional Occupation: Yes.

24% of workers in survey responses were female.

**Turnover:** Moderate, 18% in the past 12 months.

**Unionization:** No.

# WHERE THE JOBS ARE

Broadcast and Print Media
Colleges and Universities
Multi Media Companies
Public Realtions Firms
Web Site Development Companies

	<u>Full-Time</u>
Medical Insurance:	89%
Dental Insurance:	89%
Vision Insurance:	78%
Life Insurance:	89%
Paid Sick Leave:	100%
Paid Vacation:	100%
Retirement Plan:	56%

<sup>\*</sup>The percentage is based on the number of employers offering fringe benefits and responding to this question.

# **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, in-house promotion or transfer, internet web sites, "networking".

### SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult		
A Little Difficult	X	X
Not Difficult		

Job Market for: Webmasters

Experienced applicants: Competitive Inexperienced applicants: Competitive

#### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> Most Web Masters work full-time, 42 hours per week. A few work on a temporary or on call basis, 31 hours per week. Some work as independent contractors, consultants or through a temporary staffing agency.

Hourly Wages	Range	Median
New Hires, No Experience:	\$8.00 - 15.50	\$11.50
New Hires, With Experience:	\$10.00 - 20.75	\$15.00
After Three Years With the Firm:	\$14.00 - 28.50	\$19.25

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: No data available OES Growth Projections: No data available

New Job Growth Rate: No data available

<u>Employer Outlook on Employment:</u> Almost all responding employers project employment to grow over the next three years.

**Employer Responses:** 15 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 227

#### **Key Terms:**

# **WELDERS and CUTTERS**

**OES 939140** 

Welders and Cutters use flamecutting, hand, arc and gas welding equipment and gas torches to weld together metal components of such products as pipelines, automobiles, boilers and ships or join together components of fabricated sheet metal assemblies or cut, trim or scarf metal objects to dimensions as specified by layout, work orders or blueprints.

Alternate Job Titles: Arc Cutter, Arc Welder, Gas Welder, Welder Assembler, Shipfitters, Production Welders

**Related DOT Codes:** 810.384-010, 810.384-014. 810.664-010, 810.684-010, 811.684-014, 816.364-010,

# **EDUCATION, TRAINING, EXPERIENCE AND SKILLS**

**Education:** All recent hires have a high school diploma or equivalent.

**Training:** Most firms sometimes allow training to substitute for work experience. Employers prefer applicants with 6 - 12 months training and possess a welding certificate.

**Experience:** Most firms always require related work experience.

They prefer applicants with 4 - 5 years experience as a Pipefitter Helper, Machine Welder or Sheet Metal Worker.

# **Skills rated "very important":**

Ability to read and follow instructions

Ability to work independently

Ability to pass a work performance test

Ability to do arc welding

Ability to stand for long periods of time

Ability to work in awkward positions or confined spaces

Possession of a mechanical aptitude

Ability to read blueprints

Oral communication skills

Ability to do precision work

Ability to perform physically demanding tasks

Knowledge of lazer technology

Knowledge of welding of welding engineering

Operating computerized welding machines

# OCCUPATIONAL CHARACTERISTICS

Career Ladders: Promote to: Lead Foreman,

Supervisor

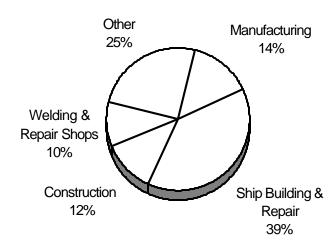
Nontraditional Occupation: Yes.

7% of workers in survey responses were female.

**Turnover:** Moderately high, 28% in the past 12 months.

Unionization: Yes. 25% of employers and 92% of employees surveyed.

# WHERE THE JOBS ARE



	Full-Time
Medical Insurance:	93%
Dental Insurance:	79%
Vision Insurance:	57%
Life Insurance:	79%
Paid Sick Leave:	29%
Paid Vacation:	93%
Retirement Plan:	36%
Other: 401-K Plan, Profit Sh.	aring,

Union Retirement Plan

and responding to this question.

\*The percentage is based on the number of employers offering fringe benefits

### **Most Frequently Used Recruitment Methods:**

Employee referrals, newspaper advertisements, union hall referrals, job fairs, Employment Development Department, public school referrals, in-house promotion or transfer.

# SUPPLY AND DEMAND

Employers' Difficulty in Finding Qualified Applicants	Experienced Applicants	Inexperienced Applicants
Very Difficult		
Somewhat Difficult	X	X
A Little Difficult		
Not Difficult		

Job Market for: Welders and Cutters

Experienced applicants: Somewhat competitive Inexperienced applicants: Somewhat competitive

### **HOURS AND WAGES**

<u>Average Weekly Hours:</u> All responding employers indicate Welders and Cutters work full-time, 41 hours per week.

Hourly Wages	Range	Median
New Hires, No Experience: Union:	\$5.50 - 15.00 \$7.25 - 12.00	\$7.00 \$10.00
New Hires, With Experience: Union:	\$8.00 - 20.00 \$11.00 - 13.25	\$12.00 \$12.50
After Three Years With the Firm: Union:	\$13.00 - 25.00 \$14.00 - 16.75	\$14.00 \$15.50

### OCCUPATIONAL SIZE AND GROWTH PROJECTIONS

Size of 1999 Employment: Medium - Range 1,662 - 3,323

OES Growth Projections: New jobs through 2004: 230

Separations to 2004: 370

\*Total Openings: 400

**New Job Growth Rate:** 11.6%\*. Projected growth is slower when compared to the county-wide average of 17.7%\*.

\*7 year period 1997 through 2004.

<u>Employer Outlook on Employment:</u> Most responding employers project employment to remain stable over the next three years.

**Employer Responses:** 16 employers supplied data used in this analysis.

Education / Training Providers: See Appendix A, page 230

#### **Key Terms:**

# APPENDIX A

SOURCES OF
EDUCATION AND TRAINING
FOR 1998 - 2000 OCCUPATIONS

# **Education and Training Sources for 2000 Occupational Outlook Report**

#### **Accountants and Auditors**

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Kelsev Jenny College

201 A St. San Diego, CA 92101 619-233-7418 www.kelsey-jenney.com

# Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

www.nu.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### Park College

Joint Education Center, Bldg. 1331, Rm. 207 Camp Pendleton, CA 92055 760-725-6858 www.park.edu

#### Point Loma Nazarene University

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700 www.swc.cc.ca.us

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### University of Phoenix

3890 Murphy Canyon Rd. San Diego, CA 92123 619-576-7469

www.uophx.edu/sandiego

### University of San Diego

5998 Alcála Park San Diego, CA 92110 619-260-4506 www.acusd.edu

#### **Activities Directors**

# University of California, San Diego, Extension Program

9500 Gilman Dr. San Diego, CA 92093 858-534-3400

www.esps.ucsd.edu

# Assemblers, Electrical & Electronic Equipment, Precision

#### Advanced Training Associates

1870 Joe Crossen Dr., Ste. B El Cajon, CA 92020 619-596-2766 www.advanced training.net

#### **Applied Professional Training**

6976 Mimosa Dr. Carlsbad, CA 92009 800-431-8488

www.aptc.com

# Assemblers, Electrical & cont'd Electronic Equipment, Precision

### **Center for Employment & Training**

3295 Market St. San Diego, CA 92102 619-233-6829 and

1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

# Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

# Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

#### **Assemblers & Fabricators**

# **Center for Employment & Training** 3295 Market St.

San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### Occupational Training Services, Inc.

8799 Balboa Ave., Suite 100 San Diego, CA 92123 858-560-0411 www.ots2000.com

### San Diego Community College District/ Continuing Education Centre City

1400 Park Blvd. San Diego, CA 92101 619-230-2300

### San Diego Community College District/Continuing Education Educational Cultural Complex

4343 Ocean View Blvd. San Diego, CA 92113 619-527-5258

# Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

# Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### **Automated Assemblyline Technicians**

### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

# Bio-Process or Chemical-Process Technicians (Inspectors Testers & Graders

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121

www.miracosta.cc.ca.us

### Miramar Community College

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

#### **Biotechnology Laboratory Assistants**

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

# **Bookkeeping, Accounting Clerks**

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Escondido Adult Education**

3750 Mary Lane Escondido, CA 92025 760-739-7300

#### First Software Academy

9574 Lamar St. Spring Valley, CA 91977 619-464-2500 www.3t.org

cont'd

#### Bookkeeping, Accounting Clerks cont'd

**Grossmont Adult Education** 

1100 Murray Dr. El Cajon, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

**Montgomery Adult School** 

3240 Palm Ave. San Diego, CA 92154 619-628-3017

National City Adult School

517 W. 24<sup>th</sup> St. National City, CA 91950 619-336-7037 nca.suhsd.k12.ca.us

**Nordstrom Business Institute** 

4995 Murphy Canyon Rd. San Diego, CA 92123 858-279-7188

Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, South County

1355 Second Ave.

Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

San Diego Community College Cont. Ed. Centre City

1440 Park Blvd. San Diego, CA 92101 619-230-2300

San Diego Community College Cont. Ed. Caesar Chavez Center

1960 National Blvd. San Diego, CA 92113 619-230-2895

San Diego Community College Cont. Ed. Mid City Center

5348 University Ave. San Diego, CA 92105 619-265-3455

San Diego Community College Cont. Ed. North City Center

7405 Mesa College Dr. San Diego, CA 92111 858-627-2545

San Diego Community College Cont. Ed. West City Center

3249 Fordham St. San Diego, CA 92110 619-221-6973

San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92181 619-594-5152 www.ces.sdsu.edu

University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400

www.esps.ucsd.edu

Valley Career College

878 Jackman St. El Cajon, CA 92020 619-593-5111

#### **Bus and Truck Mechanics**

**Miramar Community College** 

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

**Palomar Community College** 

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

Career, Vocational, Educational Counselors

Chapman University 7460 Mission Valley Rd. San Diego, CA 92108

619-296-8660

www.chapman.edu/cll/ac

#### Career, Vocational, Educational Counselors

#### cont'd

#### **Christian Heritage College**

2100 Greenfield Dr. El Cajon, CA 92019 619-588-7747

www.christianheritage.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### Carpenters

#### **Associated General Contractors of America**

6212 Ferris Square San Diego, CA 92121 858-558-0739 www.agcsd.org

#### **Black Contractors Association of San Diego**

6125 Imperial Ave. San Diego, CA 92114 619-263-9791

#### **Center For Employment Training**

3295 Market St. San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92029 760-744-1150

www.palomar.edu

204

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### San Dieguito Adult Education

710 Encinitas Blvd. Encinitas, CA 92024 760-753-7073

### Southern California Carpentry Joint Apprentice & Training Committee

8595 Miralani Dr. San Diego, CA 92126 858-621-2667 www.californiacarpenters.org

#### Chemical Dependency / Substance Abuse Counselors

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### **Christian Heritage College**

2100 Greenfield Dr. El Cajon, CA 92019 619-441-2200.

www.christianheritage.edu

### Griffin & Wong Institute for Education and Training

2870 Fourth Ave., #100 San Diego, CA 92101 619-294-9852

www.realsolutions.org

**National University** 

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200 www.nu.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 93101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-635-4772 www.usiu.edu

#### Chemists

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gccd.cc.ca.us/grossmont/

#### Chemists

cont'd

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 93101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### University of California, San Diego

9500 Gilman Dr. San Diego, CA 92093 858-534-2230

www.ucsd.edu

#### **University of San Diego**

5998 Alcala Park San Diego, CA 92110 619-260-4600 www.acusd.edu

#### **Child Care Workers**

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.citv.sdccd.cc.ca.us/home.html

### San Diego Community College Cont. Ed. Educational Cultural Complex

4343 Ocean View Blvd. San Diego, CA 92113 619-527-5258

#### Southwestern Community College

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### **Child Care Workers**

cont'd

**Union of Pan Asian Communities Training** 

1031 25th St. San Diego, CA 92102 619-232-6454

www.upacsd.com

#### **Civil Engineering Technicians**

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### **Civil Engineers**

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230

www.ucsd.edu

#### **Computer Engineers**

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660 www.chapman.edu/cll/ac

Coleman College

7380 Parkway Dr. La Mesa, CA 91942 619-465-3990 and 1284 W. San Marcos Blvd., # 110 San Marcos, CA 92096

760-747-3990 www.coleman.edu

#### **Cuvamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr.

Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

www.nu.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

### San Diego State University Foundation, Defense Conversion Center

5178 College Ave. San Diego, CA 92182 619-594-4922

www.foundation.sdsu.edu/defcon/defhome.html

#### Southwestern Community College

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### United States International University

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### **Computer Engineers**

#### cont'd

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230 www.ucsd.edu

#### **University of Redlands**

9040 Friars Rd., Ste., 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4600 www.acusd.edu

#### **Webster University**

6480 Weathers PI., Suite 104 San Diego, CA 92121 858-458-9310 www.webster.edu/ca

#### **Computer Programmers**

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000 www.csusm.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### Coleman College

7380 Parkway Dr. La Mesa, CA 91942 619-465-3990 and 1284 W. San Marcos Blvd. San Marcos, CA 92096 760-747-3990

www.coleman.edu

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### First Software Academy

9574 Lamar St. Spring Valley, CA 91977 619-464-2500 www.3t.org

#### Foundation College

5353 Mission Center Rd., Ste.100 San Diego, CA 92108 619-683-3273 www.foundationcollege.org

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600 www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121 www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200 www.nu.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

### San Diego State University Foundation, Defense Conversion Center

5178 College Ave. San Diego, CA 92182 619-594-4922

www.foundation.sdsu.edu/defcon/defhome.html

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### United States International University

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### **Computer Programmers**

#### cont'd

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230

www.ucsd.edu

### University of California, San Diego, Extended Studies

9500 Gilman Dr. La Jolla, CA 92093 858-534-3400 / 858-451-7474

www.esps.ucsd.edu

#### **University of Phoenix**

3890 Murphy Canyon Rd. San Diego, CA 92123 888-325-1509

www.uophx.edu/sandiego

#### **University of Redlands**

9040 Friars Rd., Suite 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### **University of San Diego**

5998 Alcala Park San Diego, CA 92110 619-260-4600 www.acusd.edu

#### **Webster University**

6480 Weathers Pl., Suite 104 San Diego, CA 92121 858-458-9310

www.webster.edu/ca

#### Concierges

#### **Travel University International**

3870 Murphy Canyon Rd., Suite 310 San Diego, CA 92123 858-292-9755

www.traveluniversity.edu

#### **Correction Officers and Jailers**

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121
www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200 www.nu.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### Park College

Joint Education Center, Bldg. 1331, Rm. 207 Camp Pendleton, CA 92055 760-725-6858 www.park.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego State University

5300 Campanile Dr.

San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92181 619-594-5152

www.ces.sdsu.edu

#### **Union Institute**

2877 Camino Del Rio South, Ste. 115 San Diego, CA 93108 619-491-0484 / 800 899-8501 www.tui.edu

#### **Customer Service Representatives**

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Data Base Administrators**

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### **Data Base Administrators**

#### cont'd

#### Coleman College

7380 Parkway Dr. La Mesa, CA 91942 619-465-3990 and 1284 W. San Marcos Blvd. San Marcos, CA 92096 760-747-3990

www.coleman.edu

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Foundation College**

5353 Mission Center Rd., Ste.100 San Diego, CA 92108 619-683-3273 www.foundationcollege.org

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### **Learnsoft Technology Group**

9720 Scanton Rd. San Diego, CA 92121 858-546-1400 www.learnsoft.com

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600 www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800

intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### Park College

Joint Education Center, Bldg. 1331, Rm. 207 Camp Pendleton, CA 92055 760-725-6858 www.park.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669 www.ces.sdsu.edu

#### Southwestern Community College

900 Otav Lakes Rd.

Chula Vista, CA 91910 619-421-6700 www.swc.cc.ca.us

### Training Directions

6920 Miramar Rd., Ste. 309 San Diego, CA 92121 858-695-2755 www.trainingdirections.com

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230 www.ucsd.edu

#### **University of Phoenix**

3890 Murphy Canyon Rd. San Diego, CA 92123 888-325-1509 www.uophx.edu/sandiego

#### University of Redlands

9040 Friars Rd., Suite 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4600 www.acusd.edu

#### Webster University

6480 Weathers PI., Suite 104 San Diego, CA 92121 858-458-9310 www.webster.edu/ca

#### **Dental Hygienists**

#### Cabrillo College

6500 Soquel Dr. Aptos, CA 95003 831-479-6471 www.cabrillo.cc.ca.us/divisions/becho/dh/dental/DHhmpq1.html

#### Chabot College

25555 Hesperian Blvd. Hayward, CA 94545 510-768-6898

www.clpccd.cc.ca.us/cc

#### **Cypress College**

9200 Valley View St. Cypress, CA 90630 714-484-7283

www.cypress.cc.ca.us

#### **Diablo Valley College**

321 Golf Club Rd.
Pleasant Hill, CA 94523
925-685-1230
www.dvc.edu

#### Foothill College

12345 El Monte Ave. Los Altos Hills, CA 94022 650-949-7777

www.foothill.fhda.edu/programs/career.html

#### Fresno City College

1101 East University Ave. Fresno, CA 93741 559-244-2604

www.fcc.cc.ca.us/healthsci/hsdivision.html

#### Loma Linda University

11234 Anderson Loma Linda, CA 92354 909-558-4621 / 800-422-4558 www.llu.edu/llu/dentistry/admissions/ admitinfo.html

#### Pasadena City College

1570 East Colorado Blvd. Pasadena, CA 91106 626-585-7123

www.paccd.cc.ca.us

#### Sacramento City College

3835 Freeport Blvd. Sacramento, CA 95822 916-558-2271

www.scc.losrios.cc.ca.us

#### San Joaquin Valley College

8400 W. Mineral King Visalia, CA 93291 559-651-2500

www.sjvc.com

#### **Taft College**

29 Emmons Park Dr. Taft, CA 93268 661-763-7706 www.taft.cc.ca.us/

#### University of California, San Francisco School of Dentistry

Millberry Union, Room 200 San Francisco, CA 94143 415-476-8280

www.ucsf.edu/den/dentlhyg.htm

#### **West Los Angeles College**

4800 Freshman Dr. Culver City, CA 90230 310-287-4200

www.geocities.com/~wlac

#### **Dietetic Technicians**

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Education Administrators**

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300

www.usiu.edu

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230

www.ucsd.edu

#### **Education Administrators**

cont'd

#### **University of San Diego**

5998 Alcala Park San Diego, CA 92110 619-260-4600

www.acusd.edu

#### **Electrical, Electronic Assemblers**

#### **Center For Employment Training**

3295 Market St. San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### International Mutual Assistance Association

4102 El Cajon Blvd. San Diego, CA 92105 619-584-4018

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### San Diego Community College Cont. Ed. Educational Cultural Complex

4343 Ocean View Blvd. San Diego, CA 92113 619-527-5258

#### **Electrical & Electronic Engineers**

#### **National University**

4141 Camino Del Rio South

San Diego, CA 92108 619-563-7200 www.nu.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### San Diego State University Foundation, Defense Conversion Center

5178 College Ave. San Diego, CA 92182 619-594-4922

www.foundation.sdsu.edu/defcon/defhome.html

#### University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230 www.ucsd.edu

#### **University of San Diego**

5998 Alcala Park San Diego, CA 92110 619-260-4600 www.acusd.edu

#### **Electrical and Electronic Technicians**

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### ITT Technical Institute

9680 Granite Ridge Dr. San Diego, CA 92123 858-571-8500 www.itt-tech.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

### San Diego Community College Cont. Ed. Skills Center, Center City

1400 Park Blvd. San Diego, CA 92101 619-230-2300

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700 www.swc.cc.ca.us

#### **Financial Planners**

#### A.D. Banker & Company

8775 Aero Dr., #138 San Diego, CA 92123 800-866-2468

#### Financial Planners

#### cont'd

#### **Anthony Schools of San Diego**

5939 Balboa Ave. San Diego, CA 92111 800-272-2162

www.anthonyschools.com

#### Mike Russ Financial Training Centers

8322 Clairemont Mesa Blvd., Ste.103 San Diego, CA 92111-1317 800-724-5661

www.mikeruss.org

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### **Food Service Managers**

#### **Family Health Services**

2850 Sixth Ave., Ste. 408 San Diego, CA 92103 619-294-2192

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### **Travel University International**

3870 Murphy Canyon Rd., Suite 310 San Diego, CA 92123

858-292-9755

www.traveluniversitv.edu

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### **General Office Clerks**

#### **Able-Disabled Advocacy**

2850 Sixth Ave., Ste. 311 San Diego, CA 92103 619-231-5990 surferjet.com/ada

#### **Coronado Adult Education**

650 E. Ave. Coronado, CA 92118 619-522-8911

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 www.gcccd.cc.ca.us/grossmont/

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### Montgomery Adult School

3240 Palm Ave. San Diego, CA 92154 619-628-3017

#### **Nordstrom Business Institute**

4995 Murphy Canyon Rd. San Diego, CA 92123 858-279-7188

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### San Ysidro Center Adult School

4220 Otay Mesa Rd. San Ysidro, CA 93173 619-662-4026

#### United Education Institute

1323 Sixth Ave. San Diego, CA 92101 619-544-9800 www.uei.org

#### **General Secretaries**

#### **Able-Disabled Advocacy**

2850 Sixth Ave., Ste. 311 San Diego, CA 92103 619-231-5990 surferiet.com/ada

#### **Escondido Adult Education**

3750 Mary Lane Escondido, CA 92025 760-739-7300

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619 579-4770

www.grossmont.k12.ca.us/adult/adulted.html

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### **Kelsey Jenny College**

201 A St. San Diego, CA 92101 619-233-7418

www.kelsey-jenney.com and

7310 Miramar Rd. San Diego, CA 92126 858-549-5070

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600 www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121
www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### Montgomery Adult School

3240 Palm Ave. San Diego, CA 92154 619-691-5670

#### **National City Adult School**

517 W. 24<sup>th</sup> St. National City, CA 91950 619-336-7037 nca.suhsd.k12.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### **Rane Technical Training Centers**

7875 Convoy Ct., Ste. 6 San Diego, CA 92111 858-495-0522

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### San Diego City College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us

#### San Diego Community College District Continuing Education Educational Cultural Complex

4343 Ocean View Blvd. San Diego, CA 92113 619-527-5258

#### **Skills Centers of America**

6255 University Ave., #A1 San Diego, CA 92115 619-286-6001

www.skillcenters.org and

319 Rancho Santa Fe Rd. San Marcos, CA 92069 760-736-2085

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### United Education Institute

1323 Sixth Ave. San Diego, CA 92101 619-544-9800

www.uei.org

#### **General Secretaries**

cont'd

#### Valley Career College

878 Jackman St. El Cajon, CA 92020 619-593-5111

#### **Graphic Artists**

#### **Advertising Arts College**

10025 Mesa Rim Rd. San Diego, CA 92121 858-546-0602

www.taac.edu

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Foundation College**

5353 Mission Center Rd., Ste.100 San Diego, CA 92108 619-683-3273

www.foundationcollege.org

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### Platt College, San Diego

6250 El Cajon Blvd. San Diego, CA 92115 619-265-0107 www.platt.edu

#### **Point Loma Nazarene University**

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 93101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

### University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400 www.esps.ucsd.edu

## Removal Workers

**Hazardous Materials** 

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuvamaca.gcccd.cc.ca.us/default.asp

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

## Heating, Air Conditioning and Refrigeration Mechanics

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### Plumbers & Steamfitters Local #230

6313 Nancy Ridge Dr. San Diego, CA 92121 858-554-0586

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Heating, Air Conditioning and **Refrigeration Mechanics**

cont'd

Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, **North County** 

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

San Diego Sheet Metal Joint Apprenticeship & Training Committee

4594 Mission Gorge Pl. San Diego, CA 92108 619-265-2758

#### **Hotel Desk Clerks**

San Diego Hospitality Institute

930 Gateway Center Way San Diego, CA 92102 619-527-0457

www.home.pacbell.net/progempl/index.html

Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, **North County** 

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

Regional Occupational Program, **South County** 

1355 Second Ave.

Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Human Resource Technicians**

**California Pacific University** 

9683 Tierra Grande Rd., Ste. 100 San Diego, CA 92126 858-695-3292 / 800 458-9667

www.cnu.edu

**Chapman University** 

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

**National University** 

4121 Camino Del Rio South San Diego, CA 92108-4107 619-563-7200 and 2022 University Dr. Vista, CA 92083 760-945-6100 www.nu.edu

San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

San Diego State University. College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669

www.ces.sdsu.edu

University of California, San Diego, **Extension Program** 

9500 Gilman Dr. San Diego, CA 92093 858-534-3400 www.esps.ucsd.edu

#### University of Redlands

9040 Friars Rd., Suite 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### **Import / Export Specialists**

Regional Occupational Program. South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

Southwestern Community College

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### Instructional Aides

**Cuvamaca Community College** 

900 Rancho San Diego Parkway El Caion, CA 92019 619-670-1980 / 619-660-4000 cuvamaca.gcccd.cc.ca.us/default.asp

**Grossmont Community College** 

8800 Grossmont College Dr. El Caion, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Instructional Aides**

#### cont'd

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### Interpreters, Sign Language

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### Landscape Architects

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-644-8015 www.grossmont.k12.ca.us/adult/adulted.html

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### **Legal Secretaries**

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Kelsey Jenny College

201 A St. San Diego, CA 92101 619-233-7418 www.kelsey-jenney.com

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

:.edu cont'd

#### Legal Secretaries

#### cont'd

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### Loan & Credit Clerks

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660 / 435-6272 www.chapman.edu/cll/ac

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669 www.ces.sdsu.edu

#### **United States International University**

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

#### **University of San Diego**

5998 Alcala Park San Diego, CA 92110 619-260-4506

www.acusd.edu

#### **Machinists**

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Davis Tech Centers**

13200 Kirkham Way, Ste. 114 Poway, CA 92064 858-748-9692

www.davistechcenters.com

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-579-4770

www.grossmont.k12.ca.us/adult/adulted.html

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121 / 888-201-8480

www.miracosta.cc.ca.us

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

www.sucoc.k12.ca.us/10p

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

### San Diego Community College Cont. Ed. Skills Center, Center City

1400 Park Blvd. San Diego, CA 92101 619-230-2559

#### Maintenance Repairers, General Utility

#### **Center For Employment Training**

3295 Market St. San Diego, CA 92102 619-233-6829

#### Maintenance Repairers, General Utility

#### cont'd

#### **Center For Employment Training**

1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### Comprehensive Training Systems, Inc.

497 Eleventh St. Imperial Beach, CA 91932 619-424-6650 and 3180 University Ave. San Diego, CA 92104 619-281-9133

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### Manufacturing Assistants (Chemical Equipment Controllers & Operators)

#### Rands Systems Inc., Ocean Point Tech Center

5441 Avenida Encinas, Ste. B Carlsbad, CA 92008 760-431-8355

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.citv.sdccd.cc.ca.us/home.html

#### **Massage Therapists**

#### **Academy of Professional Careers**

8376 Hercules St. La Mesa, CA 92142 619-461-5100

and 6784 El Cajon Blvd San Diego, CA 92108

www.academyofhealthcareers.com/

#### **Body Mind College**

4050 Sorrento Valley Blvd., Ste. L San Diego, CA 92121 858-453-3295 / 800-239-6463 www.bodymindcollege.com

#### **Healing Hands School of Holistic Health**

125 W. Mission, # 12 Escondido, CA 92025 760-746-9364

#### **Mueller College of Holistic Studies**

4607 Park Blvd. San Diego, CA 92116 619-291-9811 / 800-245-1976 www.muellercollege.com

#### **Pacific College of Oriental Medicine**

7445 Mission Valley Rd., Ste. 105 San Diego, CA 92108 619-574-6909 / 800-729-0941 www.ormed.edu

#### School of Healing Arts

1001 Garnet Ave., Ste. 200 San Diego, CA 92109 858-581-9429

www.schoolhealingarts.com

#### **Medical Assistants**

#### **Academy of Professional Careers**

8376 Hercules St. La Mesa, CA 92142 619-461-5100 and 6784 El Cajon Blvd San Diego, CA 92108

## www.academyofhealthcareers.com/ Center for Employment & Training

3295 Market St. San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### **Chula Vista Adult School**

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### Comprehensive Training Systems, Inc.

497 Eleventh St. Imperial Beach, CA 91932 619-424-6650 and 3180 University Ave. San Diego, CA 92104 619-281-9133

#### **Concord Career Institute**

123 Camino De La Reina, Ste. E-125 San Diego, CA 92108 619-688-0800

#### **Medical Assistants**

#### cont'd

#### **Grossmont Health Occupations Center**

9368 Oakbourne Rd Santee, CA 92071 619-596-3690

#### **Kelsey Jenny College**

201 A St.
San Diego, CA 92101
619-233-7418
and
7310 Miramar Rd.
San Diego, CA 92126
858-549-5070
www.kelsev-jenney.com

#### Maric College

3666 Kearny Villa Rd., Suite 100 San Diego, CA 92123 858-279-4500 and 2030 University Dr. Vista, CA 92083 760-630-1555

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### Occupational Training Services, Inc.

8799 Balboa Ave., Suite 100 San Diego, CA 92123 858-560-0411 www.ots2000.com

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### Pima Medical Institute

780 Bay Blvd., Ste. 101 Chula Vista, CA 91910 619-425-3200

www.pimamedical.com

#### **Rane Technical Training Centers**

7875 Convoy Ct., Ste. 6 San Diego, CA 92111 858-495-0522

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

#### Southwestern Community College

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700 www.swc.cc.ca.us

#### **United Education Institute**

1323 Sixth Ave. San Diego, CA 92101 619-544-9800

www.uei.org

#### Medical. Clinical Lab Assistants

#### **Chula Vista Adult School**

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Grossmont Health Occupations Center**

9368 Oakbourne Rd Santee, CA 92071 619-596-3690

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### **Medical Records Technicians**

#### **Grossmont Health Occupations Center**

9368 Oakbourne Rd Santee, CA 92071 619-596-3690

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop cont'd

#### Medical, Records Technicians cont'd

Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

#### **Medicine Health Service Managers**

#### California Pacific University

9683 Tierra Grande Rd., Ste. 100 San Diego, CA 92126 858-695-3292

www.cpu.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660 / 435-6272 www.chapman.edu/cll/ac

#### **National University**

3580 Aero Ct. San Diego, CA 92123 619-563-7100

www.nu.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669

www.ces.sdsu.edu

#### University of California, San Diego

9500 Gilman Dr. San Diego, CA 92093 858-534-2230 www.ucsd.edu University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400

www.esps.ucsd.edu

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4506 www.acusd.edu

Webster University

6480 Weathers Pl., Suite 104 San Diego, CA 92121 858-458-9310 www.webster.edu/ca

#### **Multi Media Specialists**

#### **Advertising Arts College**

10025 Mesa Rim Rd. San Diego, CA 92121 858-546-0602

www.taac.edu

#### Foundation College

5353 Mission Center Rd., Ste.100 San Diego, CA 92108 619-683-3273

www.foundationcollege.org

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### Platt College, San Diego

6250 El Cajon Blvd. San Diego, CA 92115 619-265-0107 www.platt.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### San Diego Community College District

San Diego Metro Career Center 8401 Aero Dr. San Diego, CA 92121 858-627-2545

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669

www.ces.sdsu.edu

### University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400 www.esps.ucsd.edu

#### **Nurse Aides**

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Nurse Aides**

cont'd

#### George G. Glenner Alzheimer's Family Ctr.

3702 Fourth Ave. San Diego, CA 92103 619-543-4707

#### **Golden Hill Health Careers Academy**

2469 Broadway San Diego, CA 92102 619-696-6053 or 696-9992

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

#### **Grossmont Health Occupations Center**

9368 Oakbourne Rd Santee, CA 92071 619-596-3690

#### Maric College

3666 Kearny Villa Rd., Suite 100 San Diego, CA 92123 858-279-4500 and 2030 University Dr. Vista, CA 92083 760-630-1555

#### **MiraCosta Community College**

One Barnard Dr.
Oceanside, CA 92056
760-757-2121

www.miracosta.cc.ca.us

#### **National City Adult School**

517 W. 24<sup>th</sup> St. National City, CA 91950 619-336-7037 nca.suhsd.k12.ca.us

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

### San Diego Community College Cont. Ed. Mid City Center

5348 University Ave. San Diego, CA 92105 619-265-3455

#### **Valley Career College**

878 Jackman St. El Cajon, CA 92020 619-593-5111

#### **Occupational Therapy Assistants**

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### **Operating Engineers**

#### **Associated General Contractors of America**

6212 Ferris Square San Diego, CA 92121 858-558-0739

#### Miramar Community College

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Operating Engineers Training Trust**

3935 Normal Street San Diego, CA 92103 619-295-3186

#### **Ophthalmic Technicians**

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

#### Pima Medical Institute

780 Bay Blvd., Ste. 101 Chula Vista, CA 91910 619-425-3200 www.pimamedical.com

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### **Painters**

#### **Associated General Contractors of America**

6212 Ferris Square San Diego, CA 92121 858-558-0739

### Southern California Painting & Drywall Industries Apprenticeship Trust

8250 Vickers, Ste. I San Diego, CA 92111 858-278-1710

#### **Paralegals**

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660 / 619 435-6272

www.chapman.edu/cll/ac cont'd

#### **Paralegals**

cont'd

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Kelsey Jenny College**

201 A St. San Diego, CA 92101 619-233-7418 www.kelsey-jenney.com

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

### University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400 www.esps.ucsd.edu

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4506 www.acusd.edu

#### **Personnel Trainers**

#### California Pacific University

9683 Tierra Grande Rd., Ste. 100 San Diego, CA 92126 858-695-3292

#### www.cpu.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

#### www.chapman.edu/cll/ac

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200 and 2022 University Dr. Vista, CA 92083 760-945-6100 www.nu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669 www.ces.sdsu.edu

### University of California, San Diego, Extended Studies

9500 Gilman Dr. La Jolla, CA 92093 858-534-3400 / 858-451-7474 www.esps.ucsd.edu

#### **University of Redlands**

9040 Friars Rd., Suite 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### **Pharmacy Technicians**

#### **Academy of Professional Careers**

8376 Hercules St. La Mesa, CA 92142 619-461-5100

and 6784 El Cajon Blvd

San Diego, CA 92108

www.academyofhealthcareers.com/

#### California College for Health Sciences

222 West 24<sup>th</sup> St. National City, CA 91950 619-477-4800 www.cchs.edu

#### **Grossmont Health Occupations Center**

9368 Oakbourne Rd Santee, CA 92071 619-596-3690

#### Pharm-Tech

P. O. Box 2082 Carlsbad, CA 92018 760-591-2800

#### **Pima Medical Institute**

780 Bay Blvd., Ste. 101 Chula Vista, CA 91910 619-425-3200 www.pimamedical.com

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

#### www.sdcoe.k12.ca.us/rop

#### United Education Institute

1323 Sixth Ave. San Diego, CA 92101 619-544-9800 www.uei.org

#### **Pharmacy Technicians**

cont'd

#### **Valley Career College**

878 Jackman St. El Cajon, CA 92020 619-593-5111

#### **Physical Therapists**

#### **Ola Grimsby Institute**

4420 Hotel Circle Court, Ste. 210 San Diego, CA 92108 619-298-4416

#### **Physician Assistants**

### Charles R. Drew University of Medicine and Science

1621 East 120<sup>th</sup> St. Los Angeles, CA 90059 213-563-4800 web.fie.com/htbin/Molis/MolisSummary?FICE=F O1966

#### **Stanford University School of Medicine**

Primary Care Associate Program 703 Welch Rd., Ste. F-1 Palo Alto, CA 94304-1760 650-723-7043

www.stanford.edu/dept/medfm/pca/tofc.html

#### University of California, Davis

FNP/PA Program, TICON II Building 2516 Stockton Blvd., Ste. 254 Sacramento, CA 95817 916-734-3550 famcommed.ucdmc.ucdavis.edu/

### University of Southern California School of Medicine

1975 Zonal Avenue, Ste. 500 Los Angeles, CA 90033 323-442-1842

www.usc.edu/schools/medicine

#### Western University of Health Sciences College of Osteopathic Medicine of the Pacific (COMP)

309 East College Plaza Pomona, CA 91766-1889 909-623-6116

www.westernu.com/overview.html

#### **Plumbers**

### Associated Builders & Contractors of San Diego

4499 Ruffin Rd., Ste. 300 San Diego, CA 92123 858-492-9300

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### Plumbers & Steamfitters Local #230

6313 Nancy Ridge Dr. San Diego, CA 92121 858-554-0586

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### **Probation, Parole Officers**

#### Chapman University

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### **Public Relations Managers**

California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

**Chapman University** 

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

**Christian Heritage College** 

2100 Greenfield Dr. El Cajon, CA 92019 619-441-2200.

www.christianheritage.edu

**MiraCosta Community College** 

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

**Miramar Community College** 

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800 intergate.miramar.sdccd.cc.ca.us

**National University** 

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

www.nu.edu

**Palomar Community College** 

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

**Point Loma Nazarene University** 

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

**Southwestern Community College** 

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

**United States International University** 

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

University of California, San Diego

9500 Gilman Dr. San Diego, CA 92093 858-534-2230 www.ucsd.edu

**University of San Diego** 

5998 Alcala Park San Diego, CA 92110 619-260-4506 www.acusd.edu

#### **Public Relations Specialists**

California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

**Chapman University** 

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

**Christian Heritage College** 

2100 Greenfield Dr. El Cajon, CA 92019 619-441-2200.

www.christianheritage.edu

**Point Loma Nazarene University** 

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273

www.ptloma.edu

San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

**United States International University** 

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300

www.usiu.edu

University of California, San Diego

9500 Gilman Dr. San Diego, CA 92093 858-534-2230

www.ucsd.edu

University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4506 www.acusd.edu

#### **Registered Nurses**

**Grossmont Community College** 

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000

www.gcccd.cc.ca.us/grossmont/

Maric College

3666 Kearny Villa Rd., Suite 100 San Diego, CA 92123 858-279-4500

#### **Registered Nurses**

cont'd

#### **Maric College**

2030 University Dr. Vista, CA 92083 760-630-1555

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

www.nu.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### University of Phoenix

3890 Murphy Canyon Rd. San Diego, CA 92123 619-576-7469

www.uophx.edu/sandiego

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4506

www.acusd.edu

225

#### Roofers

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

### San Diego & Imperial Counties Slate, Tile & Composition Roofers Joint Apprentice Com.

9455 Ridgehaven Ct., Ste. 207 San Diego, CA 92123 858-573-2813

## Sales Representatives, Non Scientific (Except Retail)

#### Sales Alliance Inc.

5230 Carroll Canyon Rd., Ste. 324 San Diego, CA 92121 858-554-0900

www.sales-alliance.com

#### Sandler Sales Institute of San Diego

3914 Murphy Canyon Rd., Suite A-150 San Diego, CA 92123

858-627-0726

www.whetstonegroup.com/school.html

#### Secretaries, Medical

#### **Academy of Professional Careers**

8376 Hercules St. La Mesa, CA 92142 619-461-5100

and

6784 El Cajon Blvd San Diego, CA 92108

www.academyofhealthcareers.com/

#### Center for Employment & Training

3295 Market St. San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### Concord Career Institute

123 Camino De La Reina, Ste. E-125 San Diego, CA 92108 619-688-0800

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-579-4770

www.grossmont.k12.ca.us/adult/adulted.html

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000

www.gcccd.cc.ca.us/grossmo.nt/

#### Maric College

3666 Kearny Villa Rd., Suite 100 San Diego, CA 92123 858-279-4500

#### Secretaries, Medical

cont'd

#### Maric College

2030 University Dr. Vista, CA 92083 760-630-1555

#### Occupational Training Services, Inc.

8799 Balboa Ave., Suite 100 San Diego, CA 92123 858-560-0411 www.ots2000.com

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### **Pima Medical Institute**

780 Bay Blvd., Ste. 101 Chula Vista, CA 91910 619-425-3200 www.pimamedical.com

#### **Rane Technical Training Centers**

7875 Convoy Ct., Ste. 6 San Diego, CA 92111 858-495-0522

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669 www.ces.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700 www.swc.cc.ca.us

#### **Sheet Metal Workers**

### Associated Builders & Contractors of San Diego

4499 Ruffin Rd., Ste. 300 San Diego, CA 92123 858-492-9300

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way

San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738

www.sdcoe.k12.ca.us/rop

### San Diego Sheet Metal Joint Apprenticeship & Training Committee

4594 Mission Gorge Pl. San Diego, CA 92108 619-265-2758

#### Sheriffs and Sheriffs Deputies

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### MiraCosta Community College

One Barnard Dr. Oceanside, CA 92056 760-757-2121

www.miracosta.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800

intergate.miramar.sdccd.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

#### Sheriffs and Sheriffs Deputies cont'd

#### **National University**

2022 University Dr. Vista, CA 92083 760-945-6100

www.nu.edu

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

#### San Diego State University, College of Extended Studies

5300 Campanile Dr. San Diego, CA 92182 619-594-5669

www.ces.sdsu.edu

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### Stock Clerks

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923

www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Surgical Technicians**

### Glendale Career College/Tri City Medical Center

4002 East Vista Way Vista, CA 92056 760-945-9896

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611

www.sdcoe.k12.ca.us/rop

#### **Southwestern Community College**

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### System Analysts and Web Masters

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92096 760-750-4000

www.csusm.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660 www.chapman.edu/cll/ac

#### **Coleman College**

7380 Parkway Dr.

La Mesa, CA 91942 619-465-3990 and 1284 W. San Marcos Blvd. San Marcos, CA 92096 760-747-3990

#### **Cuyamaca Community College**

900 Rancho San Diego Parkway El Cajon, CA 92019 619-670-1980 / 619-660-4000 cuyamaca.gcccd.cc.ca.us/default.asp

#### **Foundation College**

www.coleman.edu

5353 Mission Center Rd., Ste.100 San Diego, CA 92108 619-683-3273

www.foundationcollege.org

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020 619-465-1700 / 619-644-7000 www.gcccd.cc.ca.us/grossmont/

#### Kelsey Jenny College

201 A St. San Diego, CA 92101 619-233-7418 www.kelsey-jenney.com

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Miramar Community College**

10440 Black Mountain Rd. San Diego, CA 92126 858-536-7800

intergate.miramar.sdccd.cc.ca.us

#### **National University**

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200

www.nu.edu

cont'd

227

#### System Analysts and Web Masters cont'd

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150

www.palomar.edu

#### Park College

Joint Education Center, Bldg. 1331, Rm. 207 Camp Pendleton, CA 92055 760-725-6858

www.park.edu

#### Platt College, San Diego

6250 El Cajon Blvd. San Diego, CA 92115 619-265-0107

www.platt.edu

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871

www.sdsu.edu

### San Diego State University Foundation Defense Conversion Center

5300 Campanile Dr. San Diego, CA 92182 619-594-4992

www.foundation.sdsu.edu/defcon/defhome.html

#### University of California, San Diego

9500 Gilman Dr. San Diego, CA 92093 858-534-2230 www.ucsd.edu

### University of California, San Diego, Extended Studies

9500 Gilman Dr. San Diego, CA 92093 858-534-3400

www.esps.ucsd.edu

#### **University of Redlands**

9040 Friars Rd., Suite 310 San Diego, CA 92108 619-284-9292 newton.uor.edu/ANWC/sdcenter.html

#### University of San Diego

5998 Alcala Park San Diego, CA 92110 619-260-4506

www.acusd.edu

#### **Vortex Data Systems Inc.**

7480 Mission Valley Rd., Suite 100 San Diego, CA 92108 619-497-6400

www.vortexdata.com

#### **Webster University**

6480 Weathers Pl., Suite 104 San Diego, CA 92121 858-458-9310 www.webster.edu/ca

Teachers: Elementary, Preschool, Secondary, Vocational

#### **Azusa Pacific University**

2820 Camino Del Rio South, Ste., 100 San Diego, CA 92108 619-718-9655 www.apu.edu

#### California State University, San Marcos

333 S. Twin Oaks Valley Rd. San Marcos, CA 92069 760-750-4000 www.csusm.edu

### Carlsbad Schools Inc., The Progressive Montessori Institute

740 Pine Ave. Carlsbad, CA 92008 760-434-4161

#### Christian Heritage College

2100 Greenfield Dr. El Cajon, CA 92019 619-441-2200.

www.christianheritage.edu

#### **Chapman University**

7460 Mission Valley Rd. San Diego, CA 92108 619-296-8660

www.chapman.edu/cll/ac

#### Montessori Institute of San Diego

7467 Draper Ave. La Jolla, CA 92037 858-454-3748

#### National University

4141 Camino Del Rio South San Diego, CA 92108 619-563-7200 and 2022 University Dr. Vista, CA 92083 760-945-6100 www.nu.edu

#### Point Loma Nazarene University

3900 Lomaland Dr. San Diego, CA 92106 619-849-2273 www.ptloma.edu

#### San Diego State University

5300 Campanile Dr. San Diego, CA 92182 619-594-6871 www.sdsu.edu

#### United States International University

10455 Pomerado Rd. San Diego, CA 92131 858-271-4300 www.usiu.edu

ww.usiu.cuu

Teachers: Elementary, cont'd Preschool, Secondary, Vocational

University of California, San Diego

9500 Gilman Dr. La Jolla, CA 92093 858-534-2230 www.ucsd.edu

**University of San Diego** 

5998 Alcala Park San Diego, CA 92110 619-260-4506 www.acusd.edu

#### **Technical Writers**

#### **Mesa Community College**

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **Telephone, Cable TV Installers**

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### **International Mutual Assistance Association**

4102 El Cajon Blvd. San Diego, CA 92105 619-584-4018

#### **Tool & Die Makers**

#### Chula Vista Adult School

1034 Fourth Ave. Chula Vista, CA 91911 619-691-5760

#### **Davis Tech Centers**

13200 Kirkham Way, Ste. 114

Poway, CA 92064 858-748-9692

www.davistechcenters.com

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121 / 888-201-8480
www.miracosta.cc.ca.us

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7346

www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### San Diego City Community College

1313 Twelfth Ave. San Diego, CA 92101 619-230-2400 intergate.city.sdccd.cc.ca.us/home.html

### San Diego Community College Cont. Ed. Skills Center, Center City

1400 Park Blvd. San Diego, CA 92101 619-230-2559

#### **Travel Agents**

#### Carlson Travel Academy

5405 Morehouse Dr., Suite 130 San Diego, CA 92121 858-458-2936 www.carlsontravel.com

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### MiraCosta Community College

One Barnard Dr.
Oceanside, CA 92056
760-757-2121

www.miracosta.cc.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

### Regional Occupational Program, East County

924 E. Main El Cajon, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

### Regional Occupational Program, South County

1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

#### Southwestern Community College

900 Otay Lakes Rd. Chula Vista, CA 91910 619-421-6700

www.swc.cc.ca.us

#### Travel Experts Training School

3505 Camino Del Rio South, Suite 220 San Diego, CA 92108 619-281-4333 www.travelschool.org

#### **Travel Agents**

#### cont'd

#### **Travel University International**

3870 Murphy Canyon Rd., Suite 310 San Diego, CA 92123 858-292-9755 www.traveluniversitv.edu

#### **Truck Drivers - Heavy**

#### **Momax Truck Driving School**

149 West Calle Primera San Ysidro, CA 92173 619-425-6970

#### Regional Occupational Program, **East County**

924 E. Main El Caion, CA 92021 619-590-3923

#### www.sdcoe.k12.ca.us/rop

#### **United Truck Driving School** 2425 Camino Del Rio South. #250 San Diego, CA 92108

619-296-2020

#### Western Truck School

6996 Mission Gorge Rd. San Diego, CA 92108 800-929-1319

#### **Underwriters**

#### A.D. Banker & Company

8775 Aero Dr., #138 San Diego, CA 92123 800-866-2468

#### **Grossmont Adult Education**

1100 Murray Dr. El Cajon, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

#### **Grossmont Community College**

8800 Grossmont College Dr. El Cajon, CA 92020

619-465-1700 / 619-644-7000

www.gcccd.cc.ca.us/grossmont/

#### Regional Occupational Program, **East County**

924 F. Main El Caion, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

#### Waiters/Waitresses

#### **Family Health Services**

2850 Sixth Ave., Suite 408 San Diego, CA 92103 619-294-2192

#### Mesa Community College

7250 Mesa College Dr. San Diego, CA 92111 858-627-2600

www.sdmesa.sdccd.cc.ca.us

#### **National Bartenders School**

3160 Camino Del Rio South, #103 San Diego, CA 92108 619-283-0200

#### San Diego Hospitality Institute

930 Gateway Center Way San Diego, CA 92102 619-527-0457

www.home.pacbell.net/progempl/index.html

#### Regional Occupational Program, Metro Area

6735 Gifford Way San Diego, CA 92111 858-627-7364 www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### **Welders and Cutters**

#### **Center For Employment Training**

3295 Market St. San Diego, CA 92102 619-233-6829 and 1131 E. Washington Ave., #6 Escondido, CA 92025 760-747-9115

#### Grossmont Adult Education

1100 Murray Dr. El Caion, CA 92020 619-644-8015

www.grossmont.k12.ca.us/adult/adulted.html

#### National City Adult School

517 W. 24<sup>th</sup> St. National City, CA 91950 619-336-7037 nca.suhsd.k12.ca.us

#### **Palomar Community College**

1140 West Mission Rd. San Marcos, CA 92069 760-744-1150 www.palomar.edu

#### Regional Occupational Program, East County

924 E. Main El Caion, CA 92021 619-590-3923 www.sdcoe.k12.ca.us/rop

#### Regional Occupational Program, North County

2080 Mission Ave. Oceanside, CA 92054 760-439-5738 www.sdcoe.k12.ca.us/rop

#### Welders and Cutters

cont'd

Regional Occupational Program, South County 1355 Second Ave. Chula Vista, CA 91911 619-691-5611 www.sdcoe.k12.ca.us/rop

San Diego Community College Cont. Ed. Educational Cultural Complex 4343 Ocean View Blvd. San Diego, CA 92113 619-527-5258

### APPENDIX B

### SAN DIEGO COUNTY OCCUPATIONAL OUTLOOK

OCCUPATIONS AND WAGES 1994 - 2000

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Accountant and Auditors	1998	\$7.00 - 14.50 (10.00)	\$9.50 - 24.00 (12.00)	\$13.00 - 33.50 (16.25)
Activities Directors	1999	\$6.50 -15.00 (10.82)	\$8.00 - 17.00 (12.08)	\$9.50 -18.25 (15.34)
Union wages:		\$7.00 - 15.27 (12.84)	\$9.00 - 16.04 (14.28)	\$14.64 - 19.54 (16.69)
Administrative Assistants	1996	\$6.00 -14.75 (9.50)	\$6.00 - 14.75 (10.00)	\$9.00 - 18.00 (14.00)
Adult / Child Care Center Directors	1996	\$6.00 - 15.25 (10.25)	\$7.00 - 19.25 (12.00)	\$8.00 - 21.50 (15.50)
Architects	1997	\$8.00 - 13.00 (11.00)	\$13.00 - 18.00 (15.00)	\$16.75 - 24.00 (20.25)
Assembler and Fabricators	1999	\$5.75 - 8.00 (5.85)	\$5.75 - 8.75 (6.50)	\$7.00 - 13.00 (9.00)
Assemblers, Electrical and Electronic Eq -Precision	2000	\$5.75 - 7.00 (6.50)	\$6.25 - 9.50 (7.63)	\$8.00 - 11.00 (8.50)
Auto Body Repairers	1997	\$5.00 - 12.00 (7.00)	\$9.00-15.25 (10.00)	\$13.00 - 25.00 (15.75)
Auto Mechanics	1997	\$6.50 - 12.00 (8.00)	\$9.00 - 18.00 (10.00)	\$13.00 - 22.00 (16.00)
Automated Assemblyline Technicians	1998	\$8.50 - 16.00 (12.00)	\$10.50 - 18.00 (15.00)	\$12.00 - 24.00 (19.75)
Bakers - Bread and Pastry	1995	\$4.50 - 8.00 (5.00)	\$5.00- 10.00 (7.00)	\$7.00 - 14.00 (8.00)
·		Union (6.75)	Union (8.00)	Union (9.50)
Banquet Waiters / Waitresses -	1998	\$5.00 - 25.50 (13.00)	\$6.50 - 26.00 (14.00)	\$8.00 - 28.00 (17.00)
(Union) - Includes base wage and tips		\$7.00 - 16.50 (15.25)	\$7.00 - 21.50 (17.25)	\$8.50 - 24.50 (20.25)
Bill and Account Collectors	1997	\$6.00- 11.00 (7.75)	\$8.50 - 13.00 (10.00)	\$10.00 - 15.00 (12.00)
Billing and Rate Clerks	1996	\$4.25 - 10.00 (7.00)	\$6.00 - 13.00 (8.50)	\$8.00 - 18.00 (12.00)
Billing, Posting and Calculating Machine Operators	1996	\$6.25 - 7.25 (7.25)	\$7.00 - 8.75 (7.50)	\$9.00 - 11.75 (10.00)
Biotechnology Laboratory Assistants	1998	\$5.75 - 12.75 (8.75)	\$7.00 - 15.00 (9.00)	\$8.00 - 19.25 (11.25)
Biotechnology Research Assistants	1994	\$8.75 - 13.00 (10.75)	\$10.75 - 14.50 (11.75)	\$11.75 - 17.00 (13.50)
Bookkeeping, Accounting and Auditing Clerks	2000	\$6.00 - 8.50 (6.00)	\$7.00 - 12.00 (10.00)	\$10.00 - 15.34 (12.00)
Bus Drivers - Non School	1995	\$4.25 - 10.00 (6.00)	\$5.00 - 11.00 (7.00)	\$7.00- 11.25 (8.00)
		Union (8.50)	Union (8.50)	Union (13.75)
Bus and Truck Mechanics	2000	N/A	\$7.00 - 14.00 (12.00)	\$11.00 - 20.00 (15.00)
(Union)		(13.00)	\$11.50 - 17.78 (12.00)	\$14.00 - 20.00 (15.00)
Butcher and Meat Cutters	1995	\$4.25 - 8.00 (5.00)	\$5.00 - 16.00 (7.00)	\$5.00 - 17.00 (7.00)
		Union (7.00)	Union (16.00)	Union (16.00)
Cabinetmakers	1997	\$5.00 - 7.00 (5.50)	\$5.50 - 11.00 (8.00)	\$7.75 - 19.00 (12.00)
Carpenters	1998	\$6.00 - 10.00 (7.25)	\$9.00 - 19.00 (11.50)	\$13.00 - 25.00 (16.50)
Carpet Installers	1995	\$5.00 - 8.00 (7.00)	\$8.00 - 16.50 (10.00)	\$11.00 - 20.00 (13.00)
Cashiers	1996	\$4.25 - 11.00 (5.00)	\$4.50 - 12.00 (6.00)	\$5.00 - 16.00 (6.25)
		Union (10.75)	Union (12.00)	Union (15.25)
		,		
		1		

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Chemical Equipment Controllers				
( Bio-process/Pilot Plant Technicians)	1999	\$11.50 - 15.50 (13.46)	\$12.00 - 20.00 (18.26)	\$13.50 - 23.80 (19.23)
Chemical Equipment Controllers				
( Chemical Process/Pilot Plant Technicians)	1999	\$10.00 - 16.75 (13.67)	\$12.00 - 21.50 (16.30)	\$14.75 - 31.25 (19.18)
Chemist - Except Biochemists	1998	\$8.75 - 19.00 (13.75)	\$12.00 - 21.50 (15.00)	\$15.00 - 26.00 (18.00)
Child Care Workers	1998	\$5.00 - 9.50 (6.25)	\$6.00 - 12.00 (7.00)	\$6.50 - 15.00 (9.00)
Civil Engineers	2000	\$12.00 - 18.63 (16.74)	\$14.62 - 23.97 (18.75)	\$18.70 - 33.56 (24.29)
(Union)		\$15.05 - 15.32 (15.19)	\$16.25 - 25.68 (21.00)	\$18.79 - 32.37 (24.71)
Civil Engineering Technicians / Technologists	1998	\$9.00 - 17.75 (13.00)	\$12.00 - 18.50 (15.00)	\$14.00 - 21.75 (17.75)
Compliance Officer and Enforcement Inspectors	1996	\$10.00 - 17.00 (14.50)	\$14.00 - 20.50 (20.00)	\$17.00 - 25.00 (23.00)
		Union (15.75)	Union (17.50)	Union (19.50)
Computer Engineers	2000	\$12.00 - 16.78 (14.92)	\$11.51 - 21.58 (17.16)	\$14.49 - 33.56 (21.69)
Computer Operators	1994	\$9.00 - 11.75 (10.00)	\$10.00 - 15.00 (11.00)	\$11.75 - 18.00 (13.00)
Computer Programmers / Software Engineers	1999	\$9.00 - 19.25 (14.65)	\$11.50 - 28.75 (19.18)	\$14.50 - 36.00 (23.44)
Computer Technical Support Specialists	1994	\$9.25 - 14.50 (11.75	\$10.00 - 18.00 (12.75)	\$14.00 - 19.50 (15.50)
Concierges	1999	\$6.00 - 8.00 (7.25)	\$6.75 - 9.00 (8.00)	\$6.75 - 12.00 (9.79)
Construction Managers	1995	\$5.00 - 25.00 (10.00)	\$10.00 - 30.00 (15.00)	\$10.00 - 35.00 (17.00)
Cooks, Cafeteria or Institution	1995	\$4.75 - 7.00 (\$6.00)	\$5.50 - 8.00 (\$7.00)	\$6.00 - 10.00 (8.00)
Cooks, Restaurant	1994	\$4.50 - 7.50 (6.25)	\$5.00 - 9.00 (7.50)	\$7.00 - 12.00 (9.25)
Corrections Officers and Jailers	2000	(8.17)	(10.12)	(12.24)
		11.07 - 14.94 (12.24)	11.07 - 14.94 (14.21)	\$12.20 - 20.02 (15.70)
Cost Estimators	1997	\$9.50 - 16.75 (14.00)	\$15.00 - 19.25 (17.00)	\$19.25 - 30.00 (21.50)
Court Clerks	1996	\$8.25 - 17.50 (12.75)	\$9.50 - 19.25 (15.75)	\$11.00 - 25.75 (19.00)
		Union (12.75)	Union (13.50)	Union (15.50)
Counter and Rental Clerks	1994	\$4.25 - 7.50 (5.50)	\$4.25 - 8.50 (6.00)	\$5.50 - 12.00 (7.00)
Customer Service Representatives, Utilities	1996	\$5.00 - 13.25 (9.25)	\$8.75 - 15.50 (10.75)	\$9.25 - 19.25 (13.00)
		Union (10.75)	Union (11.25)	Union (13.00)
Customer Service Representatives	1999	\$6.00 - 17.25 (8.00)	\$7.25 - 20.50 (9.50)	\$8.00 - 27.50 (11.50)
Data Base Administrators	2000	(13.42)	\$12.79 - 21.58 (15.79)	\$16.78 - 28.33 (20.78)
Data Entry Keyers	1995	\$4.25 - 9.00 (6.00)	\$6.00 - 11.00 (7.50)	\$7.50 - 11.00 (8.00)
Data Processing Equipment Repairers	1997	\$6.00 - 10.00 (7.75)	\$9.00 - 13.75 (10.00)	\$11.00 - 20.00 (14.00)
Dental Assistants	1997	\$6.75 - 11.00 (9.00)	\$9.00 - 13.25 (11.00)	\$10.50 - 16.50 (13.75)
Dental Hygienists	1998	\$25.00 - 30.00 (30.00)	\$30.00 - 32.00 (30.50)	\$30.00 - 32.00 (31.00)

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Dental Laboratory Technicians (Precision)	1996	\$4.25 - 6.50 (5.00)	\$5.50 - 10.50 (8.25)	\$10.00 - 18.00 (15.00)
Dietetic Technicians	1999	\$5.75 - 13.50 (10.00)	\$6.00 - 14.50 (11.00)	\$9.00 - 15.25 (13.00)
Dispatchers, Except Police, Fire, Ambulance	1994	\$4.50 - 11.75 (7.25)	\$4.75 - 12.00 (8.00)	\$5.25 - 14.50 (14.00)
Drafters	1997	\$7.25 - 12.00 (9.00)	\$8.25 - 16.00 (12.00)	\$11.00 - 19.00 (14.75)
Drivers, Sales Workers	1997	\$5.75 - 12.00 (7.50)	\$6.25 - 13.00 (8.00)	\$7.50 - 15.00 (9.25)
Education Administrators	1999	\$9.50 - 32.75 (13.70)	\$12.00 - 40.00 (13.70)	\$13.00 - 42.50 (19.18)
Electrical and Electronic Assemblers	1998	\$5.50 - 8.00 (6.25)	\$6.00 - 12.50 (8.50)	\$7.50 - 18.00 (10.25)
Electrical and Electronic Engineers	1999	\$15.00 - 21.00 (17.35)	\$18.25 - 24.00 (21.58)	\$21.50 - 38.25 (24.93)
Electrical and Electronic Engineering Technicians	1999	\$9.50 - 14.00 (12.00)	\$12.25 - 17.00 (14.38)	\$16.00 - 22.00 (18.70)
Electricians	1997	\$6.00 - 21.00 (8.00)	\$10.00 - 23.00 (13.75)	\$14.25 - 27.00 (19.50)
		Union (10.00)	Union (15.00)	Union (21.75)
Electromedical and Biomedical Equipment Repairers	1996	\$6.50 - 19.25 (10.50)	\$8.00 - 20.75 (12.50)	\$11.00 - 24.00 (16.00)
		Union (14.50)	Union (17.50)	Union (19.75)
Electric Home Appliance Repairers	2000	\$7.50 - 12.00 (10.00)	\$5.75 - 14.00 (11.00)	\$5.75 - 16.00 (14.00)
With tips and commissions:		\$7.50 - 12.00 (12.00)	\$9.00 - 18.00 (12.00)	\$11.00 - 25.00 (17.50)
Emergency Medical Technicians	1996	\$5.50 - 7.00 (5.50)	\$7.00 - 9.00 (7.00)	\$9.75 - 12.00 (10.00)
		Union (6.75)	Union (8.50)	Union (12.00)
Employment Interviewers	1998	\$6.50 - 12.50 (9.50)	\$8.00 - 14.50 (11.00)	\$10.00 - 16.75 (12.75)
Environmental Engineers	1994		\$15.50 - 18.50 (17.50)	\$19.50 - 22.00 (21.25)
Event and Meeting Planners	1996	\$6.00 - 14.25 (9.50)	\$8.00 - 16.75(12.00)	\$10.00 - 24.00 (13.75)
Fiber Optic Technicians	1997	\$7.00 - 15.00 (9.00)	\$9.00 - 20.00 (\$13.00)	\$12.00 - 25.00 (15.25)
Financial Managers	1994	\$9.25 - 17.50 (13.50)	\$13.00 - 24.75 (19.50)	\$15.00 - 37.25 (26.50)
Financial Planners - combined wages and commissions	1999	\$7.25 - 23.50 (12.79	\$12.00 - 34.25 (21.31)	\$21.25 - 43.25 (28.77)
Fire Fighters	1997	\$8.25 - 12.25 (9.75)	\$9.25 - 13.25 (11.00)	\$10.00 - 15.50 (12.50)
		Union (10.50)	Union (11.25)	Union (13.25)
Fitness Instructors	1994	\$6.25 - 10.00 (8.00)	\$6.75 - 12.00 (8.25)	\$8.00 - 24.00 (11.00)
Food Preparation Workers	1997	\$4.50 - 8.00 (5.25)	\$5.00 - 9.50 (6.00)	\$6.00 - 13.00 (9.50)
Food Service Managers	1999	\$8.75 - 13.75 (10.23)	\$9.50 - 14.75 (11.99)	\$11.50 - 17.25 (14.58)
Forklift Operators	1996	\$5.50 - 14.00 (7.00)	\$7.00 - 14.75 (8.25)	\$8.50 - 16.75 (14.25)
		Union 10.00)	Union (12.25)	Union (14.25)
Gardener and Groundskeepers	1995	\$5.00 - 6.00 (5.00)	\$5.00 - 8.00 (6.00)	\$6.00 - 15.00 (8.00)
		Union (10.75)	Union (11.00)	Union (13.00)
General Office Clerks	1998	\$5.25 - 10.75 (7.25)	\$5.25 - 10.75 (8.25)	\$7.00 - 11.75 (9.50)

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Glaziers	1995	\$5.00 - 12.00 (6.00)	\$10.00 - 22.00 (11.00)	\$11.00 - 22.00 (14.00)
Graphic Artists	1998	\$6.00 - 14.75 (10.00)	\$8.00 - 17.25 (11.50)	\$10.00 - 22.00 (13.00)
Hairdresser, Hairstylist and Cosmetologists	1994	\$4.75 - 6.00 (5.50)	\$5.75 - 8.00 (7.00)	\$7.50 - 10.00 (9.00)
With Commissions:		\$5.00 - 9.00 (6.50)	\$7.75 - 12.50 (9.50)	\$10.00 - 16.00 (13.50)
Hand Packers and Packagers	2000	\$5.75 - 6.50 (6.00)	\$5.75 - 8.00 (6.50)	\$6.50 - 9.50 (7.13)
Hazardous Waste Removal Workers	2000	\$7.50 - 14.61 (10.00)	\$10.00 - 15.00 (12.00)	\$12.00 - 18.00 (14.76)
Heating, Air Conditioning Mechanics	2000	\$8.00 - 9.59 (8.25)	\$10.00 - 17.98 (13.00)	\$14.00 - 20.00 (18.00)
Health Service Managers	1995	\$5.00 - 15.00 (8.00)	\$16.00 - 27.00 (10.00)	\$17.00 - 27.00 (12.00)
Home Appliance Repairers	1989	\$5.75 - 9.00 (7.25)	\$7.50 - 10.00 (9.00)	\$10.00 - 15.00 (12.50)
Home Health Care Workers	1997	\$6.00 - 11.25 (7.00)	\$6.75 - 11.25 (8.00)	\$7.25 - 12.50 (9.00)
Hotel Desk Clerks	2000	\$7.00 - 8.00 (7.50)	\$7.00 - 8.72 (7.75)	\$8.00 - 10.00 (9.00)
Human Resources Technicians	1999	\$7.25 - 14.50 (10.00)	\$8.50 - 17.25 (12.00)	\$10.00 - 21.50 (15.17)
Import / Export Specialists	1998	\$7.25 - 12.50 (10.00)	\$8.00 - 13.50 (11.50)	\$10.00 - 15.00 (14.50)
Inspectors, Testers and Graders - Precision				
(Manufacturing Assistants)	1999	\$5.75 - 15.00 (8.00)	\$6.00 - 20.00 (9.00)	\$8.00 - 30.00 (11.51)
Instructional Aides	1999	\$5.75 - 10.75 (7.40)	\$6.00 - 11.25 (7.75)	\$7.25 - 13.00 (9.25)
Insurance Adjusters	1997	\$10.00 - 21.50 (14.00)	\$12.50 - 24.00 (15.25)	\$15.25 - 28.75 (19.25)
Insurance Claims Clerks	1996	\$5.25 - 15.00 (9.25)	\$6.00 - 20.00 (11.00)	\$7.25 - 24.00 (13.75)
Insurance Policy Clerks	1989	\$6.00 - 8.00 (7.00)	\$7.75 - 12.00 (9.75)	\$8.50 - 15.00 (11.50)
Interior Designers	1995	\$5.00 - 15.00 (7.00)	\$5.00 - 20.00 (12.00)	\$5.00 - 31.25 (15.00)
Interpreters, Sign Language	2000	N/A	\$12.05 - 22.00 (18.00)	\$12.05 - 26.00 (24.00)
Janitors	1994	\$4.25 - 9.25 (5.00)	\$4.50 - 9.75 (5.50)	\$5.00 - 11.00 (7.00)
LAN / WAN Managers (Computer Network Manager)	1994	\$13.00 - 19.50 (14.50)	\$14.75 - 21.75 (17.00)	\$17.25 - 29.00 (21.00)
Landscape Architects	1998	\$9.00 - 14.00 (12.00)	\$10.00 - 17.00 (14.00)	\$14.00 - 25.00 (18.00)
Lathers	1995	\$6.00 - 15.00 (6.00)	\$9.00 - 20.00 (15.00)	\$12.00 - 20.00 (17.00)
Legal Secretaries	1998	\$7.00 - 17.25 (13.25)	\$9.00 - 21.75 (14.75)	\$14.00 - 24.25 (17.25)
Licensed Vocational Nurses	1997	\$9.50 - 12.00 (10.00)	\$11.00 - 14.00 (12.00)	\$13.00 - 16.00 (14.00)
Loan and Credit Clerks	2000	\$6.25 - 10.00 (8.75)	\$7.50 - 12.72 (10.00)	\$9.00 - 15.14 (12.50)
Loan Officers	1997	\$9.00 - 24.00 (12.25)	\$10.50 - 28.75 (16.00)	\$10.50 - 33.50 (19.25)
Lodging Managers	1994	\$6.00 - 18.25 (8.75)	\$8.00 - 20.25 (15.00)	\$10.00 - 23.75 (18.25)
Machinists	1999	\$5.75 - 12.00 (7.00)	\$6.75 - 15.00 (12.00)	\$8.00 - 19.00 (16.00)
Union wages:		\$10.00 - 10.25 (10.13)	\$11.00 -16.00 (13.50)	\$15.00 - 22.00 (18.50)

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Managers, Personnel	1997	\$9.50 - 24.00 (13.50)	\$12.00 - 26.25 (16.75)	\$15.25 - 38.25 (20.50)
		Union (14.50)	Union (16.75)	Union (22.50)
Maids and Housekeeping Cleaners	1997	\$4.25 - 7.00 (5.75)	\$4.75 - 7.75 (6.00)	\$5.50 - 9.00 (7.00)
		Union (5.00)	Union (5.75)	Union (6.75)
Maintenance Repairers - General Utility	1998	\$6.50 - 12.25 (8.00)	\$7.75 - 17.00 (10.00)	\$9.00 - 18.00 (15.00)
		Union (8.50)	Union (9.00)	Union (13.50)
Marketing, Advertising, Public Relations Managers	1995	\$6.00 - 26.00 (10.00)	\$8.00 - 30.00 (12.50)	\$10.00 - 30.00 (17.50)
Massage Therapists	2000	8.50 - 20.00 (17.50)	\$12.00 - 30.00 (20.00)	14.00 - 60.00 (25.00)
With tips and commissions:		8.50 - 25.00 (20.00)	12.00 - 55.00 (22.00)	14.00 - 16.00 (30.00)
Mechanical Engineers	1997	\$10.00 - 16.00 (14.50)	\$14.50 - 19.25 (16.00)	\$19.25 - 24.00 (21.50)
Medical and Clinical Laboratory Technologists	1997	\$9.00 - 15.00 (13.00)	\$10.00 - 18.25 (15.25)	\$12.00 - 22.00 (18.00)
Medical and Clinical Laboratory Assistants	1999	\$6.75 - 10.50 (8.00)	\$7.75 - 13.00 (9.50)	\$10.00 - 17.00 (12.34)
Medical Assistants	1999	\$6.00 - 8.00 (7.50)	\$8.00 - 11.00 (9.00)	\$9.00 - 13.00 (10.00)
Medical Records Technicians	1998	\$5.25 - 13.75 (7.25)	\$5.75 - 16.00 (8.25)	\$6.50 - 21.00 (9.50)
Medical Secretaries	1999	\$6.00 - 10.00 (7.91)	\$7.25 - 11.50 (9.00)	\$8.50 - 14.00 (11.00)
Medicine and Health Service Managers	2000	\$10.15 - 15.34 (12.75)	\$11.67 - 25.11 (18.59)	\$12.00 - 36.50 (25.29)
Merchandise Displayer and Window Trimmers	1995	\$6.00 - 11.00 (7.00)	\$6.00 - 11.00 (9.00)	\$7.00 - 15.00 (10.00)
Multimedia Specialists	2000	\$10.00 - 15.34 (12.50)	\$10.00 - 18.00 (13.85)	\$12.79 - 30.00 (18.09)
Network Professionals	1997	\$12.00 - 21.75 (14.50)	\$12.00 - 24.00 (18.25)	\$16.50 - 26.50 (22.00)
Nurse Aides	1998	\$5.25 - 11.00 (7.00)	\$6.25 - 11.00 (7.50)	\$7.00 - 13.00 (9.00)
Occupational Therapists	1994	\$16.50 - 26.50 (17.00)	\$18.25 - 30.25 (19.75)	\$19.50 - 37.50 (22.00)
Occupational Therapy Assistants	1999	\$8.75 - 15.00 (12.38)	\$9.50 - 17.00 (14.00)	\$12.00 - 20.00 (17.00)
Offset Lithographic Press Setters	1997	\$6.00 - 10.00 (8.00)	\$8.00 - 15.00 (10.00)	\$10.00 - 24.00 (15.00)
Operating Engineers (Heavy Equipment Operators)	1998	\$8.00 - 16.00 (12.75)	\$12.00 - 22.50 (16.00)	\$16.00 - 33.00 (20.00)
Ophthalmic Technicians	1998	\$6.00 - 13.00 (9.75)	\$8.00 - 15.00 (12.00)	\$10.50 - 18.00 (15.00)
Opticians	1996	\$4.25 - 7.75 (5.50)	\$8.25 - 15.50 (10.00)	\$12.50 - 22.00 (19.25)
Optical Technicians	1995	\$5.00 - 7.50 (6.00	\$6.00 - 10.00 (7.00)	\$9.00 - 14.00 (9.00)
Order Clerks	1994	\$5.50 - 10.00 (8.25)	\$6.00 - 11.50 (9.00)	\$8.00 - 14.75 (11.50)
Paramedics	1996	\$8.50 - 9.00 (8.75)	\$10.00 - 11.00 (10.50)	\$14.25 - 14.50 (14.50)
Paralegals	1998	\$9.00 - 15.50 (13.00)	\$12.75 - 20.50 (15.75)	\$15.00 - 24.00 (19.00)
Painters	2000	\$5.75 - 7.50 (6.00)	\$7.00 - 14.25 (9.00)	\$8.00 - 16.00 (11.00)
Payroll and Timekeeping Clerks	1995	\$5.00 - 10.00 (7.00)	\$5.75 - 11.25 (8.00)	\$7.50 - 12.50 (10.50)
Personal and Home Care Aides	2000	\$5.75 - 7.00 (6.13)	\$6.25 - 8.00 (7.00)	\$7.00 - 10.00 (8.50)

	Year Survey	y Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Personnel Clerks	1996	\$6.50 - 12.50 (10.00)	\$7.50 - 15.25 (12.25)	\$8.00 - 18.00 (8.50)
Personnel Trainers	1999	\$11.00 - 28.75 (14.38)	\$13.50 - 38.25 (19.18)	\$16.50 - 48.00 (25.57)
Personnel, Training, Labor Relations Managers	1994	\$9.75 - 16.25 (10.75)	\$11.25 - 22.00 (13.75)	\$13.00 - 24.75 (14.25)
Pest Controllers	1994	\$5.00 - 7.50 (6.50)	\$6.50 - 9.00 (7.50)	\$7.50 - 13.25 (9.25)
(With Commissions)		\$5.00 - 8.50 (6.50)	\$6.50 - 10.75 (8.00)	\$8.50 - 17.50 (10.75)
Pharmacy Technicians	2000	\$6.00 - 7.50 (6.75)	\$6.50 - 13.15 (11.00)	\$9.00 - 15.81 (12.00)
Union		\$6.75 - 9.00 (7.00)	\$7.50 - 12.00 (8.00)	\$9.50 - 14.00 (10.00)
Photographers	1996	\$5.00 - 15.00 (7.50)	\$6.00 - 20.00 (10.50)	\$6.50 - 30.00 (15.00)
Physical Therapists	1999	\$13.50 - 24.00 (19.00)	\$16.75 - 26.00 (21.89)	\$19.25 - 31.00 (27.00)
Physical Therapy Aides	1997	\$5.00 - 8.00 (6.50)	\$6.50 - 10.00 (7.00)	\$8.00 - 12.00 (8.25)
Physical Therapy Assistants	1997	\$8.00 - 17.00 (10.00)	\$10.00 - 20.00 (12.00)	\$11.00 - 22.00 (15.00)
Physician Assistants	2000	N/A	\$21.10 - 26.00 (23.97)	\$26.01 - 43.15 (33.80)
Plumbers, Pipefitters, and Steamfitters	2000	\$7.00 - 9.50 (9.00)	\$10.00 - 17.00 (13.25)	\$14.00 - 25.00 (17.00)
Police Patrol Officers	1996	\$8.00 - 16.00 (12.50)	\$9.00 - 18.25 (14.00)	\$10.00 - 21.50 (15.50)
		Union (14.00)	Union (16.75)	Union (20.00)
Postal Mail Carriers	1997	\$12.75	\$13.50	\$14.25
Preschool Teachers	1995	\$5.00 - 12.00 (14.00)	\$10.00 - 24.00 (15.25)	11.00 - 27.75 (17.50)
Probation and Parole Officers	1998	\$12.00 - 16.00 (14.00)	\$17.25 - 17.50 (17.25)	\$19.25 - 21.25 (20.25)
Production Supervisors / Managers	1998	\$8.50 - 20.25 (14.00)	\$9.50 - 26.25 (15.25)	\$11.00 - 32.25 (17.50)
Property and Real Estate Managers (on-site)	1995	\$7.00 - 15.00 (10.00)	\$8.00 - 21.25 (12.50)	\$10.00 - 32.25 (15.00)
Public Relations Managers	1998	\$8.00 - 14.50 (9.75)	\$9.00 - 20.50 (13.25)	\$13.75 - 24.00 (18.00)
Public Relations Specialists and Publicity Writers	2000	\$8.63 - 11.51(10.00)	\$9.59 - 15.34 (12.55)	\$11.77 - 20.00 (16.35)
Purchasing Agents	1995	\$7.00 - 13.00 (9.00)	\$8.00 - 16.00 (13.50)	\$12.00 - 20.00 (14.00)
Radiologic Technologists (Therapeutic)	1994	\$14.50 - 17.00 (15.75)	\$15.50 - 19.00 (17.00)	\$17.00 - 21.00 (20.00)
Receptionist and Information Clerks	1997	\$5.50 - 9.00 (6.50)	\$6.50 - 10.50 (7.50)	\$8.00 - 12.00 (9.00)
Recreation Workers	1994	\$4.50 - 6.50 (5.00)	\$5.50 - 9.50 (6.75)	\$6.50 - 14.00 (8.75)
Registered Nurses	1998	\$10.00 - 18.00 (15.50)	\$13.00 - 22.00 (16.00)	\$16.00 - 32.00 (20.00)
Union wages:		\$15.00 - 16.00 (15.50)	\$16.75 - 17.00 (17.00)	\$18.50 - 19.75 (19.25)
Retail Store Managers	1997	\$7.00 - 12.25 (8.50)	\$8.50 - 12.25 (10.00)	\$10.00 - 14.00 (12.00)
Roofers	2000	\$5.75 - 9.00 (7.50)	\$6.50 - 17.00 (10.00)	\$8.00 - 20.00 (14.50)
		Union (7.00)	Union (8.50)	Union (13.00)
Sales Agents, Advertising	1995	\$5.00 - 20.00 (8.00)	\$7.25 - 20.00 (12.50)	\$9.00 - 30.00 (27.50)
		Commissions (2.00)	Commissions (5.75)	Commissions (10.00)

	Year Survey	Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Sales Agents and Placers, Insurance	1996	\$9.50-15.50 (13.50)	\$11.75-28.75 (18.25)	\$15.00-48.00 (33.50)
(Includes tips and commissions)				
Sales Agents, Select Business Services	1995	\$5.00 - 15.00 (9.00)	\$8.00 - 25.00 (12.50)	\$11.00 - 37.50 (17.00)
		Commissions (4.00)	Commissions (7.50)	Commissions (9.75)
Salesperson, Parts	1994	\$5.00 - 9.00 (7.00)	\$7.50 - 14.00 (9.25)	\$10.75 - 17.00 (14.50)
Salespersons, Retail	1996	\$4.25 - 7.00 (5.00)	\$5.50 - 8.00 (7.00)	\$7.00 - 13.00 (12.00)
·		With Commissions (7.00)	With Commissions (10.00)	With Commissions (12.00)
Sales Representatives, Except Scientific	2000	\$9.00 - 16.06 (10.36)	\$6.44 - 21.31 (13.04)	\$7.36 - 19.61 (14.20)
With commissions and bonus:		\$9.54 - 17.84 (12.10)	\$9.68 - 29.44 (17.19)	\$13.86 - 42.61 (25.13)
Sales Representatives, Scientific	1995	\$5.00 - 14.00 (7.50)	\$5.00 - 22.00 (12.00)	\$5.00 - 31.25 (20.00)
Sales Supervisors / Managers	1996	\$7.25 - 22.00 (10.25)	\$9.50 - 27.75 (12.00)	\$12.00 - 33.25 (16.75)
(With Commissions)		\$7.00 - 28.75 (19.50)	\$9.50 - 48.00 (19.50)	\$12.00 - 72.00 (30.75)
Secretaries, General	1999	\$6.00 - 10.50 (9.35)	\$7.00 - 13.25 (11.50)	\$9.00 - 17.25 (14.00)
Security Guards	1995	\$5.00 - 7.50 (6.00)	\$5.00 - 7.50 (6.00)	\$6.50 - 8.50 (7.00)
Sewing Machine Operators	1999	\$5.75 - 6.00 (5.75)	\$5.75 - 7.75 (6.50)	\$5.75 - 9.75 (7.50)
Sheet Metal Workers	2000	\$5.75 - 10.00 (7.00)	\$7.00 - 13.00 (10.13)	\$10.00 - 18.00 (14.50)
Sheriffs and Deputy Sheriffs	1999	(\$13.00)	(\$18.50)	(\$20.50)
Special Education Teachers	1996	\$8.75 - 17.25 (10.50)	\$10.50 - 20.25 (12.50)	\$14.00 - 23.75 (15.50)
		Union (13.25)	Union (16.00)	Union (17.50)
Stationary Engineers (Power Plant Operator)	1998	\$8.25 - 13.00 (10.00)	\$9.75 - 15.00 (12.00)	\$11.50 - 17.00 (16.00)
Union wages:		\$9.50 - 16.00 (14.00)	\$12.00 - 17.00 (16.00)	\$15.50 - 24.00 (20.00)
Stock Clerks, Sales Floor	1998	\$5.00 - 7.00 (5.25)	\$5.25 - 8.00 (6.00)	\$5.50 - 9.50 (7.25)
Stock Clerks, Stock Room or Warehouse	1999	\$5.75 - 10.25 (7.00)	\$6.50 - 10.75 (8.00)	\$6.50 - 10.75 (10.00)
Substance Abuse / Chemical Dependency Counselors	1998	\$6.00 - 14.50 (10.25)	\$7.00 - 16.75 (11.50)	\$9.00 - 20.00 (13.75)
Surgical Technicians	1998	\$8.50 - 12.75 (10.50)	\$10.25 - 14.00 (12.00)	\$12.00 - 17.00 (14.00)
Switchboard Operators	1995	\$4.25 - 7.50 (6.25)	\$5.00 - 8.50 (6.25)	\$6.00 - 9.25 (7.75)
System Analysts - Electronic Data Processing	1998	\$11.50 - 24.00 (16.25)	\$13.00 - 26.25 (17.75)	\$14.00 - 31.25 (20.50)
Tax Interviewers	1996	\$6.00 - 11.00 (7.50)	\$7.00 - 20.50 (9.00)	\$10.00 - 20.00 (14.00)
Teachers, Elementary School	1999	\$6.39 - 15.37 (13.46)	\$6.67 - 17.66 (14.80)	\$7.46 -22.41 (17.55)
Teachers, Preschool	2000	N/A	\$6.75 - 9.00 (7.50)	\$7.00 - 11.00 (8.75)
Teachers, Secondary School	1999	\$10.74 -15.71 (13.61)	\$11.36 - 17.66 (15.55)	\$12.95 - 26.62 (17.62)
Teachers - Vocational Education and Training	2000	(\$12.00)	\$8.00 -25.79 (13.50)	\$10.00 - 32.02 (17.87)
Technical Writers	1998	\$10.00 - 22.00 (15.00)	\$13.50 - 24.00 (18.00)	\$16.75 - 32.00 (23.75)

	Year Survey	ey Wage Range and Median		
Occupational Title	Published	No Experience	Experience	3 Years with Firm
Telecommunications Engineers	1997	\$15.25 - 19.25 (16.75)	\$19.25 - 31.25 (20.75)	\$23.75 - 37.00 (26.25)
Telemarketers and Telephone Solicitors	1996	\$5.00 - 8.00 (6.00)	\$6.00 - 10.00 (7.00)	\$6.75 - 15.00 (9.00)
With Commissions:		\$5.00 - 10.00 (6.50)	\$6.00 - 12.75 (9.50)	\$7.00 - 27.75 (20.00)
Telephone, Cable Television Installers	2000	\$6.00 - 12.00 (7.63)	\$8.00 - 15.34 (10.00)	\$9.75 - 20.00 (13.00)
Tellers	1995	\$6.00 - 7.25 (7.00)	\$7.00 - 9.00 (8.00)	\$7.00 - 9.00 (8.00)
Tool and die Makers	2000	\$13.27 - 15.18 (14.23)	\$10.50 - 18.45 (15.00)	\$12.50 - 26.37 (20.00)
Traffic, Shipping, and Receiving Clerks	1997	\$5.50 - 8.50 (7.00)	\$6.50 - 10.00 (7.75)	\$8.00 - 12.00 (9.00)
Travel Agents	1998	\$6.00 - 9.00 (6.25)	\$7.00 - 11.50 (9.00)	\$8.00 - 15.00 (11.00)
Truck Drivers, Light - Route and Delivery	1999	\$5.75 - 10.50 (7.68)	\$5.75 - 12.00 (8.08)	\$6.50 - 18.00 (10.00)
Truck Drivers, Heavy	1999	\$8.00 - 15.00 (11.19)	\$9.25 - 19.00 (14.00)	\$12.75 - 26.00 (17.50)
Union wages:		\$10.00 - 18.75 (11.50)	\$11.00 - 18.75 (12.50)	\$12.50 - 18.75 (16.00)
Typist and Word Processors	1994	\$6.00 - 8.25 (7.00)	\$6.00 - 10.75 (8.00)	\$7.50 - 13.00 (10.00)
Underwriters, (Insurance)	1998	\$6.00 - 16.00 (11.25)	\$8.00 - 20.25 (13.50)	\$10.00 - 22.75 (18.00)
Veterinary Technicians	1996	\$4.25 - 9.00 (6.25)	\$4.25 - 10.00 (8.00)	\$6.00 - 13.00 (10.50)
Vocational and Educational Counselors	1999	\$9.00 - 15.00 (11.99)	\$12.00 - 20.00 (13.90)	\$13.50 - 21.00 (17.43)
Union wages:		\$12.47 - 16.00 (14.59)	\$13.43 - 22.00 (15.41)	\$14.38 - 27.00 (18.29)
Vocational Instructor and Teachers	1995	\$9.00 - 29.00 (11.00)	\$10.00 - 29.00 (13.00)	\$12.00 - 29.00 (13.00)
		Union (23.50)	Union (24.75)	Union (28.75)
Water Treatment Plant Operators	1996	\$10.25 - 17.50 (13.50)	\$12.00 - 19.00 (15.50)	\$14.00 - 21.50 (18.00)
		Union (14.50)	Union (17.25)	Union (19.50)
Web Master / Web Site Designers	1998	\$8.00 - 15.50 (11.50)	\$10.00 - 20.75 (15.00)	\$14.00-28.50 (19.25)
Welder and Cutters	1998	\$5.50 - 15.00 (7.00)	\$8.00 - 20.00 (12.00)	\$13.00 - 25.00 (14.00)
		Union (10.00)	Union (12.50)	Union (15.50)
Window Washers	1996	\$5.00 - 10.00 (6.00)	\$5.50 - 12.00 (8.00)	\$6.00-15.00 (10.00)
Wholesale and Retail Buyers	1997	\$7.00 - 17.25 (9.00)	\$8.00 - 19.25 (12.00)	\$10.00 - 21.50 (14.50)
Writer and Editors	1996	\$5.00 - 10.00 (7.50)	\$6.00 - 12.00 (9.25)	\$9.50 - 16.00 (12.50)

#### APPENDIX C

# REGIONAL CALIFORNIA AGENCIES PROVIDING LOCAL LABOR MARKET INFORMATION

#### LOCAL AGENCY / ADDRESS

**Alameda County - Oakland** Private Industry Council 1212 Broadway, Suite 300 Oakland, CA 94612-3025 (510) 891-9393

**Butte County** Private Industry Council 2185 Baldwin Avenue Oroville, CA 95966 (530) 538-6798

Contra Costa County Private Industry Council 2425 Bisso Lane, Suite 100 Concord, CA 94520-4817 (925) 646-5239

**Fresno County** Workforce Development Board 1999 Tuolume St., Suite 700 Fresno, CA 93721 (559) 233-3744

Golden Sierra Job Training Agency (Alpine, El Dorado, Nevada, Placer, Sierra Counties) 11549 "F" Avenue Auburn, CA 95603 (530) 823-4631 **Humboldt County** Employment Training Department 930 Sixth St Eureka, CA 95501 (707) 441-4642

Private Industry Council of **Imperial County** 760 Main St El Centro, CA 92243 (760) 353-5050

**Kern / Inyo / Mono Counties,** Employer's Training Resource 2001 28th Street Bakersfield, CA 93301 (661) 336-6849

**Kings County** Job Training, Government Center 1400 W. Lacey Blvd. Hanford, CA 93230 (559) 582-9213

Los Angeles County
City of Long Beach, Business Development Center
200 Pine Ave., Suite 400
Long Beach, CA 90802
(562) 570-3865

#### LOCAL AGENCY / ADDRESS

Madera County Workforce Assistance Office 209 Seventh Street Madera, CA 93638 (559) 673-7031

Marin Employment Connection 2955 Kerner Blvd., #D San Rafael, CA 94901 (415) 446-4453

**Mendocino County** Private Industry Council 630 Kings Court, Suite 204 Ukiah, CA 95482 (707) 468-1196

**Merced County** Private Industry Training Department 1880 Wardrobe Ave.

Merced, CA 95340
(209) 385-7324 ext.2042

Monterey County Private Industry Council 730 LaGuardia St. Salinas, CA 93905 (831) 755-3247

Mother Lode Job Training Agency (Amador, Calaveras, Mariposa, Tuolumne Counties) 19900 Cedar Road North Sonora, CA 95370 (209) 533-3396

Napa County Training and Employment Center 650 Imperial Way Napa, CA 94559 (707) 253-4291 NoRTEC Consortium (Del Norte, Lassen, Modoc, Plumas, Siskiyou, Tehema, Trinity Counties)

7000 Franklin Blvd.,Building 1100 Sacramento, CA 95823 (916) 262-2217

North Central Counties Consortium (Colusa, Glenn, Lake, Sutter, Yuba Counties)

1215 Plumas Yuba City, CA 95991 (530) 822-7145

**Orange County** Job Training Partnership Agency 1300 South Grand Ave., Bldg B, Third Floor Santa Ana, CA 92705 (714) 834-7146

**Riverside County** Workforce Development Center 1151 Spruce Street Riverside, CA 92507 (909) 955-3100

#### Sacramento/Yolo Counties

Department of Employment & Social Services 112 West Main Street Woodland, CA 95695 (530) 661-2900

San Benito County, NOVA Private Industry Council 505 West Olive Ave., Suite 550 Sunnyvale, CA 94086 (408) 730-7232

**San Bernardino** Jobs & Employment Service Department 1075 S. Mount Vernon Ave. Colton, CA 92324 (909) 433-3300

#### LOCAL AGENCY / ADDRESS

**San Francisco** Private Industry Council 1650 Mission St., Suite 300 San Francisco, CA 94103 (415) 431-8700

San Joaquin Employment & Economic Development Department 850 North Hunter Street Stockton, CA 95202 (209) 468-3571

Private Industry Council of **San Luis Obispo County** 4111 Broad St., #A
San Luis Obispo, CA 93401
(805) 788-2600

**Santa Barbara County** Job Training Network 2400 Professional Parkway, Suite 150 Santa Maria, CA 93455 (805) 739-8650

Santa Clara County, NOVA Private Industry Council 505 West Olive Ave., Suite 550 Sunnyvale, CA 94086 (408) 730-7232

County of Santa Cruz Human Resource Agency 1040 Emeline Avenue, Building E Santa Cruz, CA 95060 (831) 454-4080

Shasta County Private Industry Council 1220 Sacramento St. Redding, CA 96001 (530) 245-1584 **Solano County** Private Industry Council 320 Campus Lane Suisun, CA 94585 (707) 864-3370

Sonoma County Private Industry Council Job Training Office 2245 Challenger Way, Suite 104 Santa Rosa, CA 95407 (707) 565-5550

Private Industry Council of **Stanislaus County** 251 E. Hackett Rd., C-2 P.O. Box 3389 Modesto, CA 95353-3389 (209) 558-2100

**Tulare County** Private Industry Council 2374 West Whitendale Visalia, CA 93277 (559) 737-4246

County of Ventura Workforce Development Division - JTPA 635 South Ventura Road Oxnard, CA 93030

(805) 382-5200

243 San Diego County

San Diego Workforce Partnership, Inc. 1551 Fourth Avenue, Suite 600 San Diego, CA 92101 619/238-1445 619/238-6063 fax 619/238-7246 TDD

> 888/884-SDWP (7397) www.workforce.org

The San Diego Workforce Partnership, Inc. provides equal opportunity in its programs, services and employment.

Auxiliary aids and services are available upon request to individuals with disabilities.